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NATIONAL EDUCATION ASSOCIATION
OF THE UNITED STATES

Proceedings of the

Department of Superintendence

St. Louis, Missouri

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FEBRUARY, 1912

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NATIONAL EDUCATION ASSOCIATION
OF THE
UNITED STATES

PROCEEDINGS
OF THE
DEPARTMENT OF SUPERINTENDENCE

AT THE ANNUAL MEETING
HELD AT
ST. LOUIS, MISSOURI
FEBRUARY 27-29, 1912

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DEPARTMENT OF SUPERINTENDENCE

ST. LOUIS MEETING, FEBRUARY 27–29, 1912

SECRETARY'S MINUTES

FIRST DAY

MORNING SESSION—TUESDAY, FEBRUARY 27, 1912

The Department of Superintendence of the National Education Association met in the Banquet Hall of the Planters Hotel, St. Louis, Mo., at 9:30 A.M., President Charles E. Chadsey, superintendent of schools, Denver, Colo., presiding.

The meeting was opened with an address of welcome by Rhodes E. Cave, president of the Board of Education, St. Louis, Mo.

Before taking up the program for the morning, President Chadsey made announcement of the following appointments:

COMMITTEE ON NOMINATIONS

Ellis U. Graff, superintendent of schools, Omaha, Nebr.
Walter E. Ranger, state commissioner of public schools, Providence, R.I.
Ada Van Stone Harris, assistant superintendent of schools, Richmond, Va.
Otis E. Hall, superintendent of Montgomery County schools, Crawfordsville, Ind.
W. T. Carrington, president of State Normal School, Springfield, Mo.

COMMITTEE ON RESOLUTIONS

Francis G. Blair, state superintendent of public instruction, Springfield, Ill.
Reed B. Teitrick, deputy superintendent of public instruction, Harrisburg, Pa.
Bruce M. Watson, superintendent of schools, Spokane, Wash.
Charles S. Clark, superintendent of schools, Somerville, Mass.
M. E. Pearson, superintendent of schools, Kansas City, Kans.

The program for this first session was as follows:

Topic: Organization Affecting the Course of Study and Economy of Time

1. "Waste and Efficiency in School Studies"—W. H. Elson, superintendent of schools, Cleveland, Ohio.
2. "Departmental Teaching in the Elementary Grades"—W. L. Stephens, superintendent of schools, Lincoln, Nebr.
3. "The Child versus Promotion Machinery"—D. E. Phillips, president of Board of Education, Denver, Colo.
4. "Some Adjustments and Changes in the Course of Study and School Organization Suggested by the Needs and the Capacities of Children That Vary from the Standards Set for Average Pupils"—D. H. Christensen, superintendent of schools, Salt Lake City, Utah.
5. "The Junior High School: A New Plan of School Organization"—J. H. Francis, superintendent of schools, Los Angeles, Cal.

AFTERNOON SESSION

The meeting was called to order at 2:30 P.M. in the Planters Hotel Banquet Hall by President Chadsey, and the program was presented as follows:

Topic: The Determining of School Efficiency

1. "The Value of the Educational Commission in Determining the Efficiency of a City School System"—Calvin N. Kendall, commissioner of education for New Jersey, Trenton, N.J.

2. "The Relation of the Urban Community to Its School System"—M. G. Brumbaugh, superintendent of schools, Philadelphia, Pa.

3. "How May a City Best Determine Its Unmet Educational Needs?"—W. H. Allen, director of the Bureau of Municipal Research, New York, N.Y.

4. "Quantitative Tests in Education"—George H. Chatfield, secretary of the Permanent Census Board, New York, N.Y.

A discussion of the topic of the session was participated in by W. H. Maxwell, superintendent of public schools, New York, N.Y., F. V. Thompson, assistant superintendent of public schools, Boston, Mass., and W. H. Allen, director of the Bureau of Municipal Research, New York, N.Y.

EVENING SESSION

The evening meeting was held in the Banquet Hall of the Southern Hotel, and was called to order at 8:15 P.M. by President Chadsey. The following addresses were given:

"Ideals and Modern Education"—A. Ross Hill, president of the University of Missouri, Columbia, Mo.

"The Function of the Kindergarten in the American Public-School System"—Lucy Wheelock, Wheelock Kindergarten Training School, Boston, Mass.

SECOND DAY

MORNING SESSION—WEDNESDAY, FEBRUARY 28, 1912

The meeting was called to order by President Chadsey at 9:30 A.M. in the Southern Hotel Banquet Hall.

Previous to the consideration of the program as printed, H. B. Wilson, superintendent of schools, Decatur, Ill., spoke concerning the work of the Committee of the Department on Economy of Time in Elementary and Secondary Education, and presented the following motion:

I move the continuance of this committee for another year, the scope of the committee to be extended to cover the work of secondary schools, as well as that of the elementary schools; said committee to be known as the Committee of the Department of Superintendence on Economy of Time in Elementary and Secondary Education, and said committee to study and investigate with the aim of making a report and recommendations pertaining to the matter of economy of time in elementary and secondary education;

And, that it may be enabled to work on the problem in a thoro and extensive way, I move that this Department request the Council to recommend to the Committee on Investigations and Appropriations the setting apart of $250 to meet the necessary expenses of this committee.

This motion was duly presented and carried.

The following program was then given:

Topic: Problems Relating to Child Welfare

1. "The Duty of Superintendents in the Enforcement of Child Labor Laws"—Owen R. Lovejoy, general secretary of National Child Labor Committee, New York, N.Y.

2. "How Far Shall the Public-School System Care for the Feeble-minded?"—James H. Van Sickle, superintendent of schools, Springfield, Mass.

3. "The City Trade School—An Important Instrumentality for Improving the Vocational Need of the City Child"—Carroll G. Pearse, superintendent of schools, Milwaukee, Wis.

4. "How Should the School System Contribute to an Intelligent Choice of Vocation on the Part of the Pupil?"—George Platt Knox, assistant superintendent of schools, St. Louis, Mo.

5. "The Education of Girls"—L. D. Harvey, president of Stout Institute, Menomonie, Wis.

The annual business meeting followed the morning program, and was called to order by the President at 12 M.

Invitations from various cities desiring the 1913 meeting were first presented. The cities were: Boston, Mass.; Buffalo, N.Y.; Detroit, Mich.; Oklahoma City, Okla.; Palm Beach, Fla.; Philadelphia, Pa.; Richmond, Va.; and Washington, D.C. John W. Cook, president of State Normal School, De Kalb, Ill., and W. L. Stephens, superintendent of schools, Lincoln, Nebr., were appointed tellers. The first ballot resulted as follows: Boston, 15; Buffalo, 106; Detroit, 18; Oklahoma City, 141; Palm Beach, 87; Philadelphia, 150; Richmond, 84; Washington, 3.

Mr. Treasure of Maryland moved that the next ballot be confined to the three highest ranking cities. The motion was carried.

Mr. Foulk of West Virginia moved that if a third ballot be necessary, it be taken upon the two cities having the largest number of votes. This motion was carried.

Upon the second ballot Philadelphia received 316 votes; Oklahoma City, 195; Buffalo, 82. Philadelphia, having received a majority of the votes cast, was declared chosen as the place of the meeting of the Department for 1913.

The report of the Committee on Nominations was presented by Ellis U. Graff, superintendent of schools, Omaha, Nebr., chairman, as follows:

Your Committee on nominations begs leave to submit the following report:

For *President*—Frank B. Dyer, superintendent of schools, Cincinnati, Ohio.

For *First Vice-President*—Samuel Hamilton, superintendent of schools of Allegheny County, Pittsburgh, Pa.

For *Second Vice-President*—Mrs. Ellor Carlisle Ripley, assistant superintendent of schools, Boston, Mass.

For *Secretary*—Burr Walter Torreyson, State Department of Education, Little Rock, Ark.

Upon the motion of the Chairman the report of the committee was adopted, and the Secretary was instructed to cast the unanimous ballot of the Department for the persons named for the various positions. The ballot was so cast and the persons named were declared duly elected.

The following report of the Committee on Resolutions was presented by Francis G. Blair, state superintendent of public instruction, Springfield, Ill., chairman:

Your Committee on Resolutions presents the following resolutions, which it considers worthy of the attention and approval of the Department of Superintendence:

1. *Resolved*, That we express our hearty appreciation of the solid, earnest, professional character of the program presented before this, the greatest meeting in the history of the Department.

2. *Resolved*, That this Department recognize the Panama-Pacific International Exposition, to be held in San Francisco in 1915, as a great opportunity to exhibit our educational progress, and that we urge the state, county, and city systems of schools to prepare and to send such of their work as will reveal the development of all phases of education thruout the nation.

3. *Resolved*, That the members of this Department who are charged with the administration of public-school systems welcome and encourage all fair and candid investigation thru commissions or other agencies into the soundness and effectiveness of the policies and methods used and the results obtained, but that we condemn and resent all such investigations whose obvious purposes are to debase the systems or exalt the investigators.

4. *Resolved*, That we approve the work contemplated in the bill now pending in Congress providing for the creation of a Children's Bureau, but that we believe that it can be done more efficiently and economically by the Bureau of Education and that we hereby request Congress to appropriate sufficient funds to the Bureau of Education to enable it to do the work satisfactorily.

5. *Resolved*, further, That this Department of Superintendence of the National Education Association use every honorable means to secure from Congress a recognition of the nation-wide need for a great enlargement of the Bureau of Education, and that we urge Congress to provide the revenue necessary to carry into effect the wise policies recommended by the Commissioner of Education.

6. *Resolved*, That the Committee on Uniform Records and Reports appointed by this Department two years ago be continued in order to aid in the adoption and use of their records and reports by school officers.

7. *Resolved*, That we express our hearty appreciation of the hospitality of St. Louis and the welcome extended to us by the Board of Education and teachers, and that we especially thank Superintendent Ben Blewett for his courtesy and untiring efforts to make this meeting successful, pleasant and profitable.

Respectfully submitted,

FRANCIS G. BLAIR, *Chairman*
M. E. PEARSON
REED B. TEITRICK
CHARLES S. CLARK
BRUCE M. WATSON
Committee

The report was adopted unanimously.

David B. Johnson, president of Winthrop Normal and Industrial College, Rock Hill, S.C., was next recognized. He presented the following resolution from the National Committee on Agricultural Education, and moved its adoption:

WHEREAS the Page Bill, or Senate Bill Number Three, introduced by Senator Page in the Senate of the United States, seeks to accomplish the good purposes of the Burkett-Pollard and Dolliver-Davis bills and other good purposes not provided for in those bills, and has now been amended to suit the needs of all the states, and

WHEREAS it proposes to co-operate with the states in encouraging instruction in agriculture, the trades and industries, and home economics in secondary schools; in preparing teachers for these vocational courses in state colleges of agriculture and the mechanic arts; in maintaining instruction in these vocational subjects in state normal schools; and in maintaining extension departments in state colleges of agriculture and mechanic arts,

Therefore be it resolved, That we indorse the Page Bill, or Senate Bill Number Three, and call upon the members of the United States Senate and House of Representatives to pass it promptly in the best interests of all the people.

Mr. Downing of New York moved that the motion be tabled. His motion was carried by *viva voce* vote.

David Felmley, president of the State Normal University, Normal, Ill., presented the following resolution and moved its adoption:

Resolved, That the Department of Superintendence hereby approve the action of the Modern Language Association and of the Illinois State Teachers' Association, in adopting in their publications and correspondence the simplified spellings recommended by the Simplified Spelling Board in its Circular No. 23, and we respectfully petition our National Education Association Board of Directors to adopt at their next meeting the same norm of spelling in the publications and correspondence of the National Education Association.

Resolved, That a committee of five be appointed by the chair to present our above petition to the Board of Directors at its next meeting and to use their best endeavor to secure the desired action.

A motion to lay the resolution upon the table was carried by a standing vote of 173 to 128.

E. O. Vaile, of Oak Park, Ill., presented the following resolution and moved its adoption:

Resolved, That as an expression of the Department's appreciation of the action taken by the Modern Language Association, the American Dialect Society, and the American Philological Association, at their late meetings, indorsing the phonetic key alphabet adopted by the Department, February 24, 1911, it is hereby ordered that the resolutions passed by said societies be entered upon our minutes, and a copy of this resolution be sent to the Secretary of each.

A motion by Mr. Blair of Illinois that the resolution be laid upon the table was passed by *viva voce* vote.

Arthur D. Call, district superintendent of schools, Hartford, Conn., moved as follows:

That the vote of this Department at the Mobile meeting adopting the Universal System of Key Notation be rescinded.

Miss Blake of New York moved that Mr. Call's motion be laid upon the table. This motion was lost by a vote of 129 to 150. The previous question was moved and carried. The vote upon Mr. Call's motion was then taken as follows: Affirmative, 154; negative, 93. Mr. Call's motion was declared carried.

The meeting was adjourned by the President without formal motion.

AFTERNOON SESSION

The members of the Department of Superintendence met in round-table conferences, as follows:

(A) ROUND TABLE OF STATE AND COUNTY SUPERINTENDENTS

Leader—Samuel Hamilton, superintendent of public schools, Allegheny County, Pittsburgh, Pa.

Topic: Agriculture in the Rural School

1. "The Educative Value of the Study of Agriculture"—Earl Barnes, lecturer on educational topics, Philadelphia, Pa.
2. "The Teaching of Agriculture in the Rural Schools: (*a*) To What Extent Can Agriculture Be Taught below the High School? (*b*) What the States Have Done in Teaching Agriculture in Rural Schools"—Philander P. Claxton, United States Commissioner of Education, Washington, D.C.
3. "The Next Step in Teaching Agriculture in the Rural Schools"—E. C. Bishop, Schools Section, Iowa State College, Ames, Iowa.
4. General discussion, led by Reed B. Teitrick, deputy superintendent of public instruction, Harrisburg, Pa.; F. L. Keeler, deputy superintendent of public instruction, Lansing, Mich.

(B) ROUND TABLE OF SUPERINTENDENTS OF LARGER CITIES

Leader—M. G. Brumbaugh, superintendent of schools, Philadelphia, Pa.

1. "Types of Special Schools in the Larger American Cities with Special Courses of Training for Special Groups of Children"—Andrew Edson, associate superintendent of schools, New York, N.Y.
2. "A Definite Propaganda to Impress upon the American Mind the Necessity of an Expansion of the Field of Education to Provide as Ample Facilities for Education by Work and Education by Play as Are Now Provided for Education by Study"—M. G. Brumbaugh, superintendent of schools, Philadelphia, Pa.

The following took part in the discussion of these papers: W. A. Greeson, superintendent of public schools, Grand Rapids, Mich.; J. A. Brooks, superintendent of public schools, Dallas, Tex.; David Snedden, commissioner of education, Boston, Mass.; J. S. Collins, assistant superintendent of public schools, St. Louis, Mo., and N. C. Schaeffer, state superintendent of public instruction, Harrisburg, Pa.

(C) ROUND TABLE OF SUPERINTENDENTS OF SMALLER CITIES

Leader—S. O. Hartwell, superintendent of schools, Kalamazoo, Mich.

1. "Scientific Study of School Work in Arithmetic"—J. T. Giles, superintendent of schools, Marion, Ind. Discussion led by Cliff W. Stone, State Normal School, Farmville, Va.
2. "The Unified High School"—W. A. Brandenburg, superintendent of schools, Oklahoma City, Okla.
3. "Utilization of the School Plant"—William A. Wirt, superintendent of schools, Gary, Ind. Discussion by Harlan Updegraff, Bureau of Education, Washington, D.C., and James G. Riggs, State Normal School, Oswego, N.Y.
4. Brief discussion of other suggested topics.

EVENING SESSION

The meeting was called to order at 8:15 P.M. in the Southern Hotel Banquet Hall by President Chadsey, and the following program was presented:

1. "Vocational Guidance"—Meyer E. Bloomfield, director of Vocational Bureau, Boston, Mass.
2. "America's Most Important Unsolved Educational Problems"—Philander P. Claxton, United States Commissioner of Education, Washington, D.C.
3. "The Schoolhouse as the Civic and Social Center of the Community"—Edward J. Ward, University of Wisconsin, Madison, Wis.

THIRD DAY

MORNING SESSION—THURSDAY, FEBRUARY 29, 1912

This session took the form of a joint meeting with the National Council of Education and was called to order at 9:30 A.M. in the Southern Hotel Banquet Hall by President Charles H. Keyes of the National Council. The program was given as follows:

1. "Report of Committee on Uniform Records and Reports"—Payson Smith, state superintendent of public schools, Augusta, Me. Discussion by Harlan Updegraff, chief of the division of school administration, Bureau of Education, Washington, D.C.; E. C. Warriner, superintendent of schools, Saginaw, Mich.; S. L. Heeter, superintendent of schools, St. Paul, Minn.; W. H. Elson, superintendent of schools, Cleveland, Ohio. General discussion by Walter E. Ranger, state commissioner of public schools, Providence, R.I.; Calvin N. Kendall, state commissioner of education, Trenton, N.J.
2. "By What Standards or Tests Shall the Efficiency of a School, or System of Schools, be Measured?"

a) "The Scope and Plan of the Proposed Work of the Committee"—George Drayton Strayer, professor of educational administration, Teachers College, Columbia University, New York, N.Y.

b) "Some Determining Considerations"—James H. Van Sickle, superintendent of schools, Springfield, Mass.

c) "Rural-School Phases of the Problem"—Edward C. Elliott, professor of education, University of Wisconsin, Madison, Wis.

Discussion by Carroll G. Pearse, superintendent of schools, Milwaukee, Wis; Z. X. Snyder, president of Colorado State Teachers College, Greeley, Colo. General discussion by Charles H. Judd, director of the School of Education, University of Chicago, Chicago, Ill.; Louis D. Coffman, supervisor of training, State Normal School, Charleston, Ill. Frederick E. Bolton, director of School of Education, State University of Iowa, Iowa City, Iowa.

AFTERNOON SESSION

The meeting was called to order by President Chadsey at 2:30 P.M. in the Southern Hotel Banquet Hall.

The Secretary read an invitation from the President and the Committee of Organization to participate in the Fifteenth International Congress on Hygiene and Demography to be held at Washington, September 23 to 28, 1912. Mr. Cook of Illinois moved that the President be instructed to make such appointments as are necessary to satisfy the courtesies of the situation. This motion was carried.

The program was then taken up, as follows:

1. "'The Bookman' in his Relation to the Textbook Problem"—Frank A. Fitzpatrick, manager of the American Book Company, Boston, Mass.
2. "The Effect on Education and Morals of the Moving-Picture Shows"—Joseph R. Fulk, superintendent of schools, Seward, Nebr.
3. "The Standardization of Janitor Service"—G. M. Wilson, superintendent of schools, Connersville, Ind.
4. "Relative Cost of Education of High- and Elementary-School Pupils"—Ernest O. Holland, superintendent of schools, Louisville, Ky.

At the close of the program the meeting adjourned.

HARLAN UPDEGRAFF, *Secretary*

PAPERS AND DISCUSSIONS

ADDRESS OF WELCOME

RHODES E. CAVE, PRESIDENT OF THE BOARD OF EDUCATION, ST. LOUIS, MO.

The heartiest of welcomes is usually the briefest, and as our welcome to you is indeed hearty, so shall I attempt to make it brief. There is an old quotation, no doubt familiar to most of you, but its appropriateness to this occasion is so marked that I cannot refrain from its repetition. It is said that that celebrated old teacher Florus, when asked with what patience he could bear to sit in the schools and teach boys, replied:

> I do not wonder that you are now of this opinion with which I also at one time struggled. For in the last four years I had become so wearied of my occupation that I did not think that a more wretched man lived. But afterward, reviewing and comparing my lot with the fortunes and labors of others, the beauty of the work which I had undertaken at length dawned upon me. Therefore you must know that no kingly power, no praetorship, no honor can be compared with this profession of ours. If the mightiest of emperors were to bestow on me a centurionship it would indeed seem no small honor, if he should grant me a praefectship or a tribunate doubtless it would seem the same; but if, then, not Caesar but Fortune grant me the gift to preside over honorable and generous boys, ought I not seem to you to have attained unto a beautiful and glorious office? For I ask you closely to consider this question, whether it is nobler to command men wearing the military coat or boys clad in the toga praetexta, barbarous and wild hearts or civilized and harmless ones? O, good Jupiter, how regal, how imperial it is to sit upon a raised platform modeling good characters and directing the pursuit of sacred literature.

Such, gentlemen, is the high, the true appreciation of the profession, of the art, of teaching. Such is the spirit which you must embody; such the conception of it with which you must be imbued. Such is the conception of it which we know moves and inspires our own superintendent. And with that spirit, in that feeling, and in that conception of this noble profession, it is an exceeding great pleasure not only to those gathered here, but to all our city, to open gladly our every door to you as the heads of that profession and to welcome you to our fullest hospitality. Ladies and gentlemen, we are indeed glad to have you with us.

TOPIC: ORGANIZATION AFFECTING THE COURSE OF STUDY AND ECONOMY OF TIME

A. WASTE AND EFFICIENCY IN SCHOOL STUDIES

W. H. ELSON, SUPERINTENDENT OF SCHOOLS, CLEVELAND, OHIO

OLD METHODS OF DETERMINING EFFICIENCY

The study of educational waste as a factor in determining the efficiency of the school is a modern practice. In the past the school was judged largely by the number of its graduates, by the estimate the college placed on the work of the favored few who chanced to go to college, or by the exceptional student who "starred" in some particular study in his university career. Little or no account was taken of the great majority—of the number that "fell by the wayside" before reaching the sixth grade, to say nothing of those who withdrew before completing the course of the elementary school, or before graduating from high school. Nor was attention given to the length of time required to complete the course, or the number of times a pupil might have to go over the same work. In short, the whole question of educational waste was ignored. Indeed, for many the problem did not even exist.

NEW STANDARDS OF EFFICIENCY

In recent years, however, new standards of efficiency have arisen and new criteria for measuring the work of the school have been established. The school is brought face to face with its own losses. The demand is that the school shall adapt its work to the needs of the individual child, in view of his ability, opportunity, outlook, and interests. We have begun to judge the school by its power to hold pupils once they have entered; by its power to carry children thru the course on time; by its power so to adapt its work that a given unit may be covered in a given time. These new criteria of efficiency turn the center of administrative interest from the needs of the few and the strong to the needs of the many. They place new obligations upon the school—not of doing less for the intellectually bright and for those going to college—but the duty of doing more to adjust its requirements to the abilities of the average children, and of adapting its work to the needs of those who from choice or necessity must complete their education in the public school.

WASTE BY WITHDRAWALS

The failure of the school to hold its pupils is one of the great sources of educational waste. In Cleveland it was found that for a ten-year period but 48 per cent of all the children enrolled in the first grade reached the sixth, but 36 per cent reached the seventh, and that but one pupil in four attained the eighth grade. In a word, taking the records for ten years as a basis of judgment, it was found that only one child in two ever advanced in the elementary school beyond the fifth grade. In the high school it was found that for a ten-year period one child out of every three withdrew before the second year, one out of every two withdrew before becoming a junior, and two out of every three failed to graduate.

Nor do the records show that these losses within the school are due to its breaking-down in recent years, for taking the first half of the ten-year period, the percentage of those graduating from high school or completing the eighth grade is a trifle less than for the last half of the period, thereby showing a slight gain in holding power on the part of the school.

When the life-history of ten graduating classes of high school is made the basis of judgment, the losses within the school from withdrawals are surprisingly large. Broadly speaking, it seems reasonable to conclude that of those entering the first grade, 95 per cent leave without finishing the high school, 50 per cent withdraw before reaching the sixth grade, and 75 per cent before attaining the eighth grade; while of those entering the high school, one-third leave before the second year, and two-thirds drop out before graduating. This is fairly typical of the country at large. Naturally the question arises, to what extent is the school itself, in organization, instruction, course of study, standards of values, promotion-scheme, or otherwise, responsible for these losses and for its own lack of holding power?

WHY DO CHILDREN LEAVE SCHOOL?

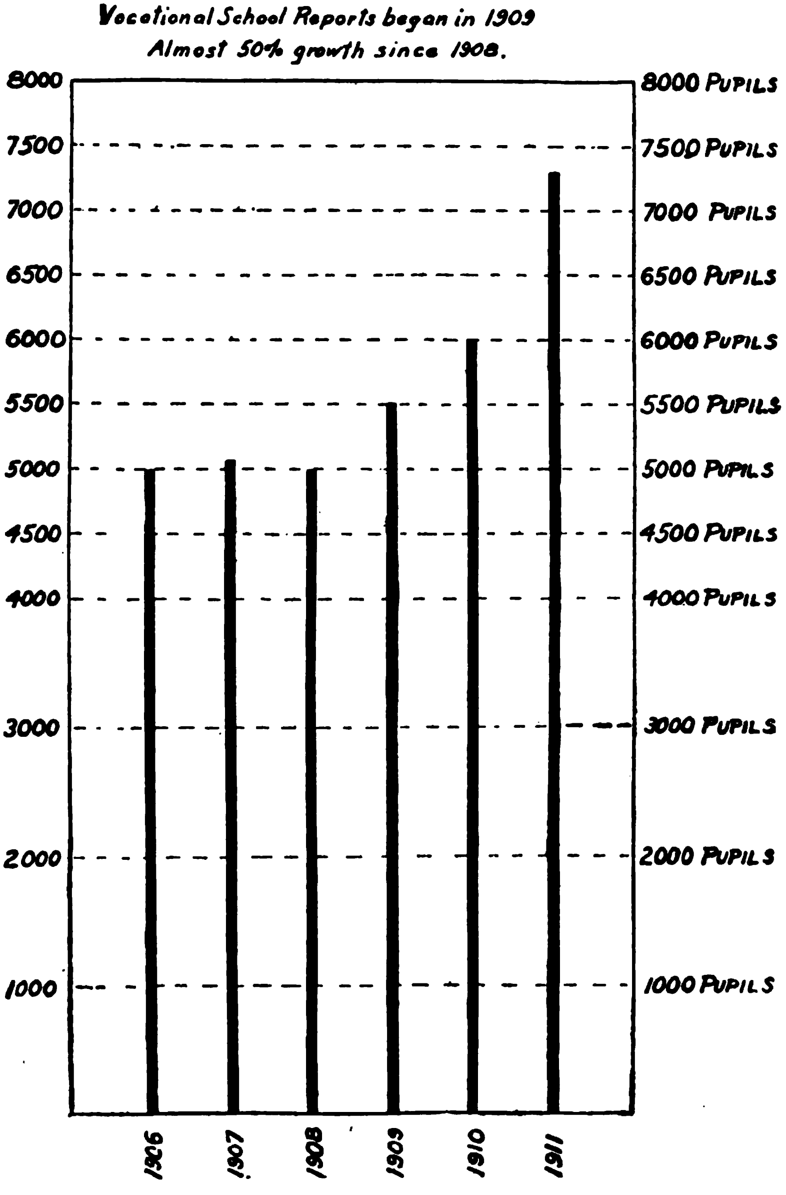
Accurate data bearing upon the causes of withdrawals from school are difficult to ascertain. The school cannot, of course, be held responsible for all the children lost to education by withdrawals; but in so far as the causes of withdrawal lie within the school itself, it must bear the burden of responsibility. It is important that careful record be made by all schools of the causes of withdrawals, to the end that a wide range of data may be made available, bearing upon the question as to why children leave school, and to warrant conclusions as to what extent the school itself is responsible for its losses. What is needed is data showing the actual effect on the holding power of the school due to changes in organization, courses of study, methods of promotion, etc.

In this connection I submit data showing the influence of practical courses in attracting and holding pupils of high-school age. Previous to 1908, Cleveland had six high schools offering the usual college-preparatory courses. In 1908 a technical high school was opened, offering four-year courses frankly preparing for work, without regard to college-entrance requirements. This school opened with 729 pupils, of which 484 had just completed the eighth grade, 122 were transferred from other high schools, and 123 were recruited from shops and factories—children who had left school and had gone to work, but who were attracted by a vocational school of this type. The next year a high school of commerce was opened, following similar lines of practical efficiency as that of the technical high school. The following table shows the influence on the holding power of the school as affected by courses bearing an immediate and close relation to the everyday activities of life.

ATTENDANCE IN CLEVELAND HIGH SCHOOLS

Year	1906	1907	1908	1909	1910	1911
College Preparatory...	4,983	5,059	4,989	4,787	4,436	5,293
Vocational..........	.....	.....	.....	729	1,560	2,005
Total..............	4,983	5,059	4,989	5,507	5,996	7,298

The above data show that in three years previous to 1908–9 the high schools did not grow, notwithstanding the city was growing at the rate of two thousand school children each year, as shown by the school census.



This is in no sense the fault of these schools, but is merely the inadequacy of a single type of school to meet the needs of all the children in a community. In 1908 vocational high schools were started, the technical in

1908, and the high school of commerce in 1909. The result is a growth in high-school attendance from 4,989 in 1908 to 7,298 in 1911—almost 50 per cent gain in three years. Moreover, it is to be observed that vocational high schools have started growth in the college-preparatory schools, and all are sharing in the revival of high-school prosperity. While for three years previous to the opening of vocational high schools the college-preparatory schools did not grow, yet these schools reached their highest enrollment in 1911, at a time when more than two thousand children were in attendance at vocational high schools. An increase of 50 per cent in high-school attendance within three years, the creation of a new high-school constituency, tends strongly to the belief that the holding power of the school is tremendously affected by the *variety of opportunity* offered, and by the relation which the school establishes with everyday activities thru the study-courses which it offers. The correcting of the maladjustment between the school and the industrial and business world outside the school, will have a marked effect in overcoming educational waste.

WASTE BY RETARDATION, REPETITION, AND NON-PROMOTION

But losses by withdrawals are affected also by retardation, for when children fall behind their grade they leave school in large numbers. In a typical city the records show that, exclusive of all special schools, one-fourth of all elementary pupils were retarded one to four years. Since these data take no account of those having withdrawn, it is apparent that conditions as to retardation are even worse than these figures indicate; for by the sixth grade more than half of those enrolled in the first have left school. Without regard to cause, retardation can have but one effect, and that is to deprive many children of the work of certain grades of the school. Since retardation is the direct result of going over the work a second time, repetition produces lamentable waste. Even in the upper grades, which deal each successive year with an increasingly select group of children, the percentage of repetition is surprisingly large. From data available it seems reasonable to conclude that, of all money spent on public education in American cities, one-tenth to one-eighth is spent on taking children over the work a second time, an enormous loss considered from any point of view. As a money tax, paid for the maladjustment of study-courses and promotion-schemes to the abilities of children, it is excessive. When the school is tested for efficiency by its ability to carry children thru its course on time it shows great waste.

But just as repetition causes retardation, so non-promotion is the prime factor in producing "repeaters." Obviously, the causes leading to non-promotion are many, some of which are beyond the responsibility of the school. However, the degree of the burden of responsibility which the school bears can be determined only in view of a wide range of data showing the causes of non-promotion. Every school should, therefore, keep careful record of actual causes of non-promotion. From the limited data available it would seem that three-fourths of the non-promotions are accredited to incapacity and indifference on the part of children. This suggests strongly the need for a revision of standards of attainment and a readjustment of the course of study, adapting it to the abilities of the children. For the maladjustment of the work of the school to the capacities and interests of children is expressed in terms of withdrawals, retardation, repetition, and non-promotion. The thoughtful student of educational waste cannot fail to reach the conclusion that the school is addressing itself to the stronger group, and setting its standards of attainment beyond the range of the average children.

METHODS AND STANDARDS OF PROMOTION

Doubtless no one factor penetrates so deeply into the life of the school and has so much to do with educational waste as methods of promotion; for these involve standards of attainment and modes of advancing children from grade to grade, as well as from school to school. To a large extent, plans of promotion have developed traditionally and without much regard to their effect on school losses. But the time is at hand when standards of attainment must be redetermined, and a plan of promotion devised in view of its effect on withdrawals and repetition—a plan which shall enable children as a rule to complete the elementary-school course on the average in eight years, and the high-school course in four years. Such a plan must be so flexible that each child shall be permitted to advance thru the school according to his ability and effort. It must allow the bright child to advance in less than the average required time, and even tho the slow child may take longer, the average, when all the children passing thru the school are taken into account, should not be more than eight years for the elementary, and four years for the high school. It must offer the "square deal" to all children. Such a method of promotion can be devised and administered only in view of a large body of facts with regard to failures in studies, withdrawals, retardations, and non-promotions in a given system of schools.

A PROBLEM IN WASTE AND HOW IT WAS SOLVED

In Cleveland the following conditions obtained: It was found that for a ten-year period only one child in two ever advanced beyond the fifth grade; that one child in four was retarded one to four years; that every tenth child was a "repeater"; that 11 per cent of all elementary-school pupils failed of promotion.

These facts with reference to withdrawals, retardation, repetition, and non-promotion were brought to bear in determining a new promotion plan and in redetermining the length of the school year. To reduce repetition, the annual plan of promotion was abandoned, and a term plan inaugurated.

A term of twelve weeks was made the unit. At the end of this period children are reclassified, and when non-promoted the pupil repeats only twelve weeks of work.

Acting on the theory that there were as many pupils in the school who could do more than the average amount of work required as there were pupils who could do less, opportunity was made for the more rapid advancement of bright pupils. Since the non-promotions less accelerations amounted to one in ten, provision was made that 10 per cent of the pupils in any room might be given a double promotion, that is, jumped over a term's work; provided, however, that no pupil might be given a double promotion unless his standing for the term in all studies was 90 per cent or above, and that no pupil should be given more than one double promotion in a single school year. Tho double promotion of a given number of pupils will by no means eradicate repetition and retardation, yet in time the number of children repeating will be equalled by the number given double promotion, and the number of children behind their grade for their age will be offset or balanced by the percentage of pupils ahead of their grade. A school system thus becomes its own clearing-house, is made to check itself, and certain bad effects of repetition and retardation are neutralized. In this way the money cost of the "repeater" is offset by the acceleration of the stronger pupils.

SUMMER SCHOOL REDUCES WASTE

That it might be possible for the large number of retarded children to advance farther in the course of the elementary school, the regular school year was divided into three terms of twelve weeks each, and a twelve-week summer school, offering regular work and giving regular credits, was established, attendance being optional.

The twelve-week summer term makes a unit of work corresponding to a unit of work of the regular school year. Retarded children by taking advantage of the summer term are enabled to reduce the degree of their retardation and advance farther in the course than formerly. Three high schools were opened for regular work for a twelve-week summer term—a college-preparatory high school, a technical high school, and a high school of commerce—to which pupils from all parts of the city were eligible. Under this arrangement pupils taking advantage of the twelve-week summer term complete a four-year course in three years. In the elementary schools there were enrolled in the summer term of 1911, 4,187 pupils, and in the high schools 1,279, a total of 5,466.

In the elementary schools 3,245 children made up a term's work, thereby reducing their amount of retardation to that extent, while 276 of these received a double promotion. Thru the summer term and the increased flexibility of the plan of promotion the school system practically checked its own losses and created a balance sheet, the number of children who lost time being equalled by the number who gained time. Moreover, the number of withdrawals was reduced over the preceding year by 2,633.

It is to be noted, however, that a regular summer term, correlating with a unit of work of the regular school year, offers no "bargain-counter" concessions to summer-school attendance on the part of retarded children. On the contrary, it merely offers a regular term's credit for a regular unit of work, done in the regular way. But a summer term which does not correlate with a unit of work of the regular school year, as must be the case under an annual or semiannual promotion plan, is reduced to the mere problem of allowing failed children an opportunity to remove their condition in certain studies. As a means of making up lost time and reducing retardation it offers merely the impossible, and does violence to children, since they must either fail of advance credit or be given credit for work which they have not done.

Whether a thirty-six-week school year and a twelve-week summer term, optional to children, and whether this mode of promotion will prove ultimately desirable, experience alone can tell. But as a method of solving the problem of educational waste, offered by the set of conditions above outlined, it has proved thoroly effective. Every school system offers its own set of conditions and its own special needs. At all events, these plans are illustrations of how definite knowledge of school conditions may be used in attempting to meet actual problems of administration. What is needed is that the course of study and the method of promotion shall be so adjusted to the abilities and needs of children that the average children advance thru the grades at the normal rate, the slower requiring more time, and an equal number of bright children requiring less than the normal time in which to do the work.

NEED FOR STANDARDIZING SUBJECTS, DEPARTMENTS, AND SCHOOLS

Notwithstanding that the value of studies is fixed by the time allotted in the daily program, study-requirements in actual practice seemingly have little relation to the value ascribed. Reading, for example, in a given system of schools is given 25 per cent of the total time of the elementary school, language and grammar 12 per cent, arithmetic 15 per cent; in the first year of the high school, Latin, English, and algebra are given like value. Nevertheless, the failures in language and grammar were, in view of the time value, almost four times as many as in reading; those in arithmetic five times larger; whereas in the first-year high-school classes 26 per cent of the children dropped out or failed in Latin, 15 per cent in English, and 32 per cent in algebra. Where records of failures in studies are properly kept it is not difficult to locate the studies that are the great offenders in swelling the ranks of the non-promoted.

Such variations reveal a need for standardization, not only in studies, but in departments as well. Standards for completing a study of great value should be such as will actually put the emphasis on that study, rather than that pressure on one study when measured by the time allotted should be two to twenty times as great as upon another. But until positive data are collected with reference to failures in studies in the various grades, and these data made the basis of administrative action, little can be accomplished in equalizing and standardizing study requirements.

There is similar need with regard to standardizing individual schools, for there is wide variation in the standards of the several schools in the same system. For example, in a given system of schools, the failures in reading, based on total enrollment, ranged from 0 to 25 per cent; in language and grammar from 0 to 34 per cent; in arithmetic from 0 to 37 per cent; while the percentage of non-promotions for individual schools ranged from 0 to 47 per cent in the first grade; in the second from 0 to 38 per cent; in the eighth grade from 0 to 55 per cent. Such variations in standards in a single system can scarcely be countenanced. That schools should be rightly judged with regard to their work, and that there should be reasonable uniformity of requirements in different schools, there can be no doubt. Yet before this can be brought about data must be collected with reference to failures in studies and non-promotions in different schools; upon the basis of these, city-wide standards fixed, and the requirements of individual schools equalized.

CONCLUSION

A study of educational waste forces the conclusion that in the collection and use of data to guide in measuring the efficiency of the school and in determining administrative action, a mere beginning has been made; that if the efficiency of the school is to be definitely measured careful record of school losses must be kept, to the end that study-courses and promotion-schemes may be adapted to the abilities, needs, and interests of all the children, and the school itself be thereby enabled to check its own waste.

B. DEPARTMENTAL TEACHING IN THE ELEMENTARY GRADES

W. L. STEPHENS, SUPERINTENDENT OF SCHOOLS, LINCOLN, NEBR.

The tendency thruout the country toward departmental teaching in the more advanced grades of the elementary school is pronounced. This tendency has in the main resulted from the following generally prevailing conditions: (1) the difficulty of securing efficient teachers for the upper grammar grades; (2) the desirability of preparing pupils to assume more easily and successfully the larger freedom and responsibility of the high school; (3) the vitalizing of instruction by the specialist to the end that the waste resulting from unskilled teaching may be lessened.

The influence of these conditions led to the introduction of departmental teaching in the elementary schools of Lincoln three years ago. Four of the ten grammar schools are using the plan, the essential features of which, as adapted to our work, are as follows:

1. The sixth, seventh, and eighth grades are included in the departmental scheme.

2. Four clearly defined departments have been created, i.e., mathematics, geography and history, grammar and composition, literature. Music is assigned to one of these departments; art to a second; and writing to a third. Each teacher gives instruction in spelling, civic and moral training, and hygiene.

Furthermore, each teacher is held responsible for the instruction of the pupils in the correct use of English in speaking and in writing.

3. Each class has a teacher, termed the class sponsor, with whom it spends in recitation and study about one-third of the time, and who is responsible for the general conduct and attendance of the class.

4. No pupil recites to more than four teachers. This number does not include teachers of manual training, cooking, and sewing.

5. Weekly conferences of the departmental teachers with the principal are held, to unify and correlate the work and to discuss the needs of individual pupils.

This plan has been in operation for a time sufficiently long to justify the drawing of certain conclusions with reference to its dangers and weaknesses as well as with reference to its advantages.

The first danger likely to be encountered in instituting the plan results from over-departmentalizing the work. Pupils should not be required to spend the whole day in the department. Not less than one-third of the time should be spent with the class sponsor, whose influence will largely mold the general welfare and deportment of the pupils. She is the anchor that will prevent the pupils from floating out of sight of land. A common objection raised to departmental teaching is that the influence of the teacher over the pupils is materially lessened. In grades below the sixth, in my judgment, this is true. But even under the single-teacher plan inherent weaknesses exist that lessen or overdevelop this influence. Many teachers who are considered efficient do not influence favorably all the individuals under their charge. Many children are not reached in a wholesome manner by the personal attraction of the teacher. Incompatibility of temperament, mannerisms, voice, or dress may exert a harmful effect upon certain children, and this often results without realization on the part of the teacher. Moreover, the "mothering instinct" is too highly developed in some teachers. They have come to consider the chief function of the teacher that of protection and coddling. In such a presence, pupils fail to realize that school is a workshop wherein they grow to independent thought and action thru their own initiative. To remain a year with such a teacher spells disaster to many a pupil during his school career. These weaknesses of the single-teacher plan are not advanced in the attempt to strengthen the argument in favor of departmental teaching, but simply to remind you that dangers lurk in both systems.

However, in the departmental plan, every pupil will find some teacher to whom he is strongly attracted and whose influence will be continuous for several years. I recall a teacher in one of our departmental schools who especially appeals to boys and whose desk at intermissions is usually surrounded by lads eager to secure her advice relative to all their school activities. To another teacher, the girls are attracted; they tell her freely of their difficulties and troubles, even more freely than many of them tell their mothers. The influences that flow in upon pupils from several teachers are more like those of life. In the home and on the playground the child is not subject to the influence of one person wholly, but to the influence of many. As a result of this composite influence the child is more likely to develop symmetrically and to preserve his individuality than if he were too constantly under the influence of one person alone. In my judgment the intimate, rare, and lasting relations between teacher and pupil are more common under the departmental plan than under the single-teacher plan.

The second danger of departmental teaching is the confusion that arises because of the pupil's contact with several teachers whose standards of requirement and whose methods and ideals of teaching differ widely. A sixth-grade boy expressed the idea in this way: "Just when I have found out how to do things the way one teacher directs, I'm sure to be in trouble with another if I follow the same plan. I can't always remember which is which." Closely related to this, is the fact that no one teacher realizes all the problems and difficulties that confront the individual pupil, and in her zeal to promote the interest and magnify the importance of her department, she forces the child beyond his power of endurance and assimilation. Herein lies the greatest danger of the departmental teaching. To meet these difficulties we have found the following methods of procedure necessary:

1. Regular weekly conferences of the teachers and principal, at which the character and scope of the work being done by each is discussed. At these conferences the possible correlations of subjects are determined. Length of assignments and amount of home work required in each department are discussed, so that each teacher realizes all the demands made upon the pupil. The weakness of a pupil in any department is disclosed and his work in the other departments is also discussed. In this way the teachers get in mind the whole work of the child, who in turn gets a fair and impartial rating. These conferences are of the most vital and far-reaching consequences. The status of the individual pupil is established, the interdependence of studies pointed out, and the vision of the teacher enlarged.

2. Clearly outlined courses of study, so that the scope of the work is clearly understood by the teacher and the temptation removed as far as possible from the overambitious and enthusiastic specialist to go beyond the required work of her department.

3. The admission of pupils to the department not earlier than the seventh grade. We admit the sixth grade to the department in order to make available four teachers for departmental teaching, but after a three years' trial, I am convinced that sixth-grade pupils do not carry successfully the responsibility imposed and are confused by the contact with several teachers. At the earliest opportunity we shall revert to the single-teacher plan for the sixth grade and employ an additional teacher for the departmental work.

There is, however, one advantage in having the sixth grade in the department. After having the opportunity to become thoroly acquainted with the pupils in the sixth grade, the departmental teachers find the adjustment between sixth- and seventh-grade work easily made, and more can be accomplished by the pupils during the two remaining years of the grammar-school course.

Thus far the paper has dealt with the dangers of departmental teaching and the manner in which these dangers can be lessened or eliminated. Let us turn to a consideration of the advantages.

Under departmental teaching the discipline is materially improved. Some reasons for this are disclosed in the answers of the pupils to this question, which was sent to all eighth grades in the departmental schools:

"Do you consider the plan of departmental teaching superior to the plan formerly used? Give your reasons for your answer."

Ninety per cent of the pupils favored the departmental plan. Of those favoring the plan 80 per cent gave these two reasons:

The change and relaxation in passing from room to room kept them alert and prevented restlessness.

The teacher, confining her efforts to one or two subjects, became more expert in teaching and made the class work more interesting and more easily understood.

These statements of the pupils themselves are significant. The educative value in coming in contact with different teachers and different environment during the day is restful, pleasing, and stimulating. Furthermore, the pupil realizes that he is a member of a larger social group, whose activities if directed aright will be more influential for good in the life of the school than those of a smaller group. He feels his importance more keenly and realizes that it is possible for his influence to have a wider sweep, therefore he is willing and anxious to assume larger responsibility. He is impelled to exert all his powers to meet successfully this larger opportunity, which is presented at the very time in life when he has an uncontrolled desire to be like the "grown-up," to bring things to pass, to go forth relentlessly to hunt the dragon and when he is found to slay him on the spot. Thus boys and girls find themselves. Under the single-teacher plan a pupil may cease endeavor because he believes, and the belief is an honest one, that the teacher is partial, unjust, and unsympathetic. Under the departmental plan, if the pupil discovers that several teachers are placing the same estimate upon him, he begins to realize that the fault must lie within, and such realization is the first step toward reform. The opportunity, then, to relax at the end of a recitation period, to come in contact with different environments which produce variety in reactions, and to become a part of a larger social whole wherein lie larger responsibilities and opportunities, produces the most wholesome disciplinary effects.

Better equipped classrooms have resulted from departmental teaching. The apparatus for the teaching of history and geography, including maps, globes, stereopticon, and other illustrative materials, is collected in one room. A similar plan is followed in the rooms devoted to the work of other departments. The advantages are obvious. All the material for use in a given subject is to be found in one room, ready for instant use, instead of being scattered in three or four rooms, meagerly equipping any one room, and making it necessary to convey equipment from room to room. Often the apparatus needed for illustration, arising from some unforeseen condition in the recitation, is in another part of the building, not subject to the principle of "the recall." Under the single-teacher plan the instructor is in almost constant distress over exchanging hurriedly the illustrative materials used in one recitation for those to be used in the following recitation. This shifting of scenes to keep the performance from dragging often reminds one of continuous vaudeville. In the departmental plan, these difficulties are almost entirely removed, and instead, each room with its proper equipment has an atmosphere characteristic of the subjects therein presented, which has a most refreshing and stimulating effect upon the pupil as he enters.

Another advantage lies in the added efficiency from the standpoint of administration. Several factors are involved in this phase of the problem. Under the single-teacher plan, when a class begins the work of a new term in all subjects under a new teacher, several weeks may elapse before the understanding between the class and the teacher is sufficiently clear and sympathetic to bring satisfactory results. In departmental teaching, the class will never begin a new period under an entirely new corps of teachers.

Responsibility for results in any subject can be fixed with more certainty. This is a decided advantage from the viewpoint of administration. For example, if glaring weaknesses are disclosed in mathematics by the supervision, the teacher of this subject cannot escape responsibility by attempting to heap censure upon the previous teacher. One of our teachers may have taken herself too seriously when she said: "If a decimal point is discovered out of place in this building, I can't escape the responsibility," yet she was in a frame of mind to render effective service.

The unity and force of the management is further increased by reason of better preparation for, and closer articulation with, the high school. About one-half the time devoted to study is spent under the direct supervision of the teacher for whose recitation the pupil is making his preparation. The remaining study periods are spent in independent study. This plan enables the teacher to give definite directions to the pupil how to study; it also affords the advantage of throwing the pupil upon his own resources in study. This independent study, together with the training the pupil acquires in adapting himself to the methods and ideals of instruction given by several teachers prepares him for the larger freedom and responsibility characteristic of the high school. At the risk of digressing somewhat at this point, I wish to say that on the whole the effect of departmental teaching upon the pupil is wholesome. The opportunity for freer action is afforded; the forming of independent judgment, encouraged more consistently. The dull pupil thrives better, because the specialist is more keen in discovering latent talent. He seeks the advice of the teacher whose personality appeals to him most strongly. Favoritism is lessened; and pupils are kept in school longer.

Under the departmental plan more skillful teachers will be developed. This will result first thru a process of elimination. It not infrequently happens that teachers who under the single-teacher plan are rated as satisfactory fail in the departmental work. This is probably due to one of two reasons, possibly to both. Pupils, as they come in contact with several teachers, rapidly grow in their ability to distinguish superior training and teaching ability. At the same time, they discern more keenly the lack of these on the part of weak teachers and take advantage accordingly. The latter kind of teachers must be removed from the department or disorganization is likely to follow. It should be noted here that the departmental plan necessitates more searching and intelligent supervision on the part of the principal. This plan does not possess such inherent power that, once let loose in a school system, it will run itself. The principal must constantly "be on the job" and in sympathy with it. As a result of this closer supervision, the weaknesses of the teacher will be more surely revealed.

The development of more efficient teaching will result, in the second place, from the opportunity afforded the teacher to specialize in one or two subjects or in a group of related subjects. It is distressing to note what is expected of the teacher under the single-teacher plan. A few of the subjects that she is supposed to teach are herewith enumerated: arithmetic, algebra, geometry, history, geography, composition, grammar, literature, music, art, spelling, writing, civics, morals and manners, elements of science, including botany, physics, astronomy, geology, hygiene with special reference to the effects of stimulants and narcotics, essence of patriotism (whatever this is), and physical training. The time allotted to this paper forbids the mentioning of others. If there is anything more perfectly designed to drown out the spirit of study and investigation on the part of the teacher than this deluge of subjects, such has not yet been revealed in the realm of human knowledge.

To secure teachers properly prepared for departmental teaching constitutes a serious problem. Our present plan is to select from the system at large those teachers who have shown unusual skill and interest in teaching a given subject. The state university offers courses after school hours and on Saturdays in order to give these teachers an opportunity for further specialization. The development is slow but ultimately success is assured. The normal schools should recognize the fact that departmental teaching in the elementary schools is rapidly gaining in favor, and should so remodel and extend their courses that the specialist may be trained for work of this character. The training now received in the normal schools does not prepare for such teaching. In the end the departments will demand the teacher whose training is little, if any, less than that of the high-school teacher, and a salary commensurate with the training demanded must be paid. As a result of this preparation, the lives of boys and girls will measurably be enriched, not by adding subjects to already congested curricula, but by the teachers' bringing a broader view, riper scholarship, and richer illustrative material to bear upon the interpretation and presentation of what we now have.

In conclusion: If the adaption of departmental teaching to the upper grammar grades is made with the following necessary provisions: avoidance of over-departmentalization; frequent conferences to determine the needs of the individual pupil and to correlate sanely the work of the departments; the hearty sympathy for, and belief of principal and teachers in, departmental teaching, results more satisfactory than those found under the single-teacher plan will be secured. The discipline will be more wholesome, classrooms better equipped; stronger unity and force in school management evolved; better preparation for the larger responsibilities of the high school acquired; a more skillful corps of instructors developed, whose teaching will be vitalized by the spirit that nourishes the life and growth of the child for whose welfare the school exists.

C. THE CHILD VERSUS PROMOTION-MACHINERY

D. E. PHILLIPS, PRESIDENT OF BOARD OF EDUCATION, DENVER, COLO.

I find that a paper presented to this body thirteen years ago apologizes for presenting a matter of "minor consideration."[1] I apologize for lack of ability to make clear in twenty minutes the paramount importance of this subject in relation to the entire educational system. I declare it second to none save that of the direct moral welfare of the child, and it also has much to do with moral life.

I also find that thirty-two years ago, the sane and sensible statement was made to the National Education Association *that promotions should be made at any time during the term, whenever a pupil is prepared to take up and understand the work of the next higher grade.* Yet today I have among my replies howling objections to this sensible statement, calling it "chaos" and a "retrogression of our excellently perfected machinery." It was about this same year, 1881, that Superintendent Howland of Chicago took the breath out of the high-school principals by announcing that henceforth all pupils would be admitted to the high school on the grade principal's recommendation, and on that alone. The poor high-school teachers felt hopeless without some definite percentage to tell just how much *past* knowledge to expect of the child. The horrors of not knowing whether the dead line of 75 per cent had been passed! This was a master-stroke of administration. Its fruits have spread to the whole country.

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[1] W. W. Chalmers, "Report," 1899.

You are all familiar with that valuable report of the New York and Brooklyn teachers' associations. I have intentionally directed my remarks to points not made prominent in that report. The thoroness of that work will account for some of the omissions in my brief paper. But if anyone can pass in silence some of the statements, not by the committee, but by educational correspondents, on such subjects as "allowing a child to work to his fullest capacity," and "doing over work satisfactorily passed," it is more than I can do.

The committee well states that "the rapid evolution during the past twenty-five years of the American common-school system of education into a hard-and-fast graded system is universally recognized"; that "no adequate incentive for highest endeavor is inherent in our present graded system." I heartily agree with the committee that our primary aim should be to put the child where he may work up to his fullest capacity to the best advantage to himself as a child.

My remarks are based upon a short practical experience some years ago; upon the study of educational problems; upon observations of the practical working of the very system which many call *ideal*, but declare impossible because they have never given it a proper test; and finally upon about two hundred replies from grade- and high-school principals and from superintendents concerning this subject. Nearly all of these replies are from the Rocky Mountain States; two-thirds of them from my own state. Twenty minutes afford no time for details of the many systems in use. I shall attempt to bring to your minds five ideas:

First, the two dominant and opposite tendencies as represented by my returns.

Second, several significant efforts to take care of the backward and the bright pupils, not coming under the general systems; such as, the Cambridge, the Pueblo, the Batavia, etc.

Third, to show that the method of daily percentage grades with final or periodic *examination-percentages*, by which the fitness of a child to be promoted is determined, is absolutely pernicious, unjust, and productive of intellectual chaos. It is this topic that the valuable report to which I referred has entirely omitted. In many ways I believe it more important than the promotion itself.

Fourth, the cloud that is in some places settling over our country schools.

Lastly, I shall try to maintain that each child should at all times be at work in the grade and in the subjects that he can get most out of, without regard to what he knows or does not know about studies behind him, and without regard to how much less or more he knows than other pupils.

Let us now turn to a brief consideration of these five points.

1. A few representative quotations from the returns must suffice.

The old conservative hard-and-fast system and the power of tradition are still powers in practice, if not in theory. A superintendent writes: "We have mid-year promotions in only a part of our subjects. In others it is a whole-year credit or nothing. We reserve the privilege of counting

25 per cent on application, and may *fail* a student who passes a *good examination.*" Another says: "Numerical grades are sent to the office to be used in special cases." A grade principal says: "We promote on the half-year plan. Provided a student fails in more than half his work, he is required to take the entire half-year's work again." Again: "Promotion is dependent upon making a certain fixed average with the exception that a child may be promoted on condition, if he is low, not to exceed two studies." The same principal adds that he has a boy in the eighth grade who did not pass the seventh, who is making up and will finish the eighth all right. Another says: "I favor, in theory, promotion by subjects. This we find difficult in practice." A superintendent of some twenty-five teachers writes: "We have numerical grades. This seems to be a necessity that we may know where we are at. There must be some guide and locating-place." Another superintendent says: "The term *promotion-machinery* is more dreadful in name than in actual operation in well-regulated schools." A principal of a large grade school writes: "We have numerical grades and pupils are required to attain a certain minimum standing in order to be promoted. However, our superintendent has a rule which he calls 'service promotion,' under which pupils are promoted after two years in one grade."

The best statement of the conservative method of promotion on a *percentage-basis* comes from a superintendent of one of the first-class districts in Colorado. "I would say that we base our promotions primarily upon percentage of grades earned in the more important studies. The plan of making promotions entirely on the judgment of the teacher may be excellent in theory, but in actual practice it very often produces grave annoyances, such as the feeling that the teacher is partial to certain children, but has it in for certain other children, who thus do not have a fair opportunity. When there are carefully selected questions given to the pupil who is old enough to answer in writing, it gives the child an opportunity to make a record concerning which there can be no reasonable dispute. . . . . After the child has gone over the same work two or three times it is our custom to promote that pupil 'by courtesy'." Again, a principal of a large high school says: "Yes, we have used the numerical system of grading, feeling that it tends to *carefulness* and *accuracy* on the part of teachers."

This is a glimpse of what I should call the conservative undercurrent; but I am rather sure that nearly every one of these would claim to be quite progressive.

Now just listen to a few conservative sentences taken from page 86 of the report already cited. In response to the question: Should the child be placed where he may work up to his fullest capacity? here are some of the things that have been said: "No, it makes them unbalanced." "No, such a condition is imbecile." "No child should get to the high school before fourteen years." "Pushing children through the grades and out at the top before they are mature enough in body and mind to profit by secondary education is akin to man-slaughter, for it is little short of child-slaughter." "It is a crime against childhood to crowd children through the grades." "I do not believe it wise to advance precocious children more rapidly than is provided by regular promotion." This makes me want to fight on behalf of the God-gifted child that is not yet able to fight for himself.

Now a few remarks from what may properly be called the liberals or radicals. From my returns I condense the following: "The old system is vicious, and has literally slain its thousands. Bright girls have been held for all the work of a grade because the teacher's recitation book and examinations only totalled 64 per cent instead of 65, perhaps in a single branch, perhaps arithmetic. This is the only question I ask any teacher to decide: Has the pupil power to do the work of the next class or subject? If so let him do it and do it now." Again: "For twenty-one years I have had no system. Systematized promotions tend to defeat our end—to advance the child according to his capacity. A hundred or more promotions have been made already this year, and only in two or three cases did we make a mistake. They are easily corrected." A superintendent says: "If promotion periods are too far apart the boy with red blood—the leader—resents such conditions; and if not relieved, breaks out into the world where he feels he has a fighting chance." "My trouble," writes a principal, "is to have teachers realize that the child is greater than any system. I hope I was never so devoid of *common-sense* as not to place a pupil in the *highest* grade in which he was able to do satisfactory work." A principal who for many years has run a large school, who has demonstrated the falsity of the claim of necessity for grades and stated examinations, the absolute falsity of the repeated statements that a school run under flexible conditions costs more, and the falsity of the statement that promotion by subjects in the grades will not work, writes me as follows: "Pupils are promoted from class to class and from grade to grade at any and all times; so soon as a pupil is discovered who can do, or should be doing more work, no matter what the grade, if the *physical* condition permits extra effort, he is advanced. It often occurs that pupils are promoted who are required to recite in two classes, until evenness in grade work is attained. No examination for these promotions is required." Again: "Whenever a child has the power to do advanced work he should be promoted, and by the application of common-sense any teacher should know fairly well when that is."

About one hundred and fifty communications are of this liberal type and the writers are practicing what they preach, and thank the Lord they have nearly all abandoned that *make-believe* justice of recitation percentage and final grade of sixty-five or seventy-five.

2. I have accounts of dozens of ways for helping up the backward child. Bare mention can be made of only a few. Combination of backward pupils of a higher grade with bright pupils of the lower in the same room under a skilled teacher; ungraded rooms for backward children; the

practice teachers being used to help up the backward children; substitution for the so-called important subjects of some of the less essential ones; attendance in night schools; combination work in eighth grade and high school: these are examples of some of the methods used. The last-mentioned system is admirable where both schools are in the same building or nearby. It relieves both the backward and the more capable pupils. One system of relief for the most capable permits the child to recite for a while in two grades in the same subject, and drop the lower one as soon as he is sure of doing the other.

3. The most unreasonable educational idea that has hypnotically spread from the colleges down to the first grade is the idea that a teacher with forty children can ask a question, call on a child to recite, grade him 0, 4, or 10; keep this up for five or ten months, then present an array of questions to be answered and graded in like manner, and by the final addition of these results determine the child's knowledge and fitness for promotion. Yet college professors and principals stand up and say that such a thing is a *necessary evil.* It is only the power of habit and the suggestion that such things are necessary that dominate our teachers and the community. Only a few days ago, I heard a principal say that he tried to get along without grades and *report cards* for three months, and found that all concerned preferred the old system. Can you educate a community or teachers out of a lifelong custom in three months? In that same city are schools as good as ever run in America in which such *necessary evils* have never existed.

Some months ago, thru the kindness of Dr. Clarke, I copied the examination manuscript of a boy's final test for promotion from the eighth grade. It was a paper in arithmetic. In some institutes where teachers were inclined to talk glibly about grading on what the paper is worth, and avoiding partiality, I gave the teachers this paper to grade. One hundred and fifty teachers gave grades ranging from 29 per cent to 88 per cent. But they immediately began to say that they would be obliged to know the *boy* first. I said, "Very well. But why do you then pretend that you base your percentage wholly on the paper?" They then named fourteen different things that should be considered in passing that boy. They were right and could have mentioned more. Again, what is poor work for one pupil may be excellent for another, and absolutely worthy of praise.

Whoever observed a growing, bubbling child knows that the expressive side of life never keeps up with the receptive side. The highest, truest, and deepest value of education can never be measured objectively. You feel it, or read it in the soul of the individual. Some things are qualitative and defy quantitative measurement. There is some truth in the paradox that the more we know about a thing the less able we are to define it. When a high-school boy I could define electricity better than Edison can today; and God knows that I could define Him better when a Sunday-school pupil than I can after years of study.

I repeat that this system of promotion on a fixed percentage supposed to represent so much knowledge in any given subject is the greatest piece of injustice ever invented by any educational system. It is a deception and a snare that prevents the operation of the common-sense of parents, pupils, and teachers. Who will stand up here and tell us the list of geographical facts a child must know in the fifth grade before he can do sixth-grade work?

4. The danger that threatens our country schools can be presented in a few words. Some states have developed the system by which the county superintendent or a state board prepares the questions that determine eighth-grade graduation. They are sent to the teachers in closed envelopes, to be given to the pupils, answered, and returned for correction. If such a vicious system was not found in my own state I would say what I think about it. During the whole year both the teacher and the pupils keep guessing what the questions may be. Proper interest, independence, and originality are crucified. How does the superintendent or this clairvoyant board know whether or not a child whom they have never seen should enter the high school?

The great nation of Italy fixes the grade percentage for passing in its national legislature, and they actually debate for days whether it should be 65, 70, or 80, and under what conditions, if any, a child should be excused from the final examination. China has had some such method for a thousand years.

5. Finally, *I must maintain that each child should, at all times, be at work in the grade and in the subjects that he can get the most out of without regard to what he knows or does not know about studies behind him, and without regard to how much more or less he knows than other pupils.* Is it not comical to talk about promoting a child "by courtesy" after he has been over the grade two or three times? Or of a "time-service promotion"?

Stephen Phillips describes "the Woman with a Dead Soul." Surely there must be some men with dead souls, or at least those whose only evidence of life is their desire to produce more souls as dead as themselves.

I further believe that the difference that separates educators is not at bottom so much a question of practical possibility as a question of the function of knowledge. I hold that outside of the immediate business or occupation of an individual the primary function of facts is to create the proper attitude toward the activities and problems of life, and to arouse interest and intellectual activity. Will it not be found that the old system of "know so much before promotion" exactly reversed this order? Under such an idea attention, interest, and intellectual activity existed for the accumulation of facts and knowledge.

Over-thoroness and accuracy have been made an immense burden without sufficient after-results in life to justify them. Intelligence, not memory, is the most precious thing in the universe; and in the language of

Principal Bishop of Detroit, "You are doing a rank injustice if you make pupils mark time or keep them back in anything."

To allow the child to make the most of every moment of life in our public schools is not impossible. It is being done. When shall we learn to teach children and not subjects and textbooks? When shall we learn that in our effort to educate all the children we must deal with minds of all grades from the imbecile to the greatest geniuses that God ever turned loose on this earth, and that it is our business to provide for all of them? When shall we learn to look into the soul of the child and realize how far above our machinery that soul might soar if only we would not care more for the machinery than for the growing soul of the child?

D. SOME ADJUSTMENTS AND CHANGES IN THE COURSE OF STUDY AND SCHOOL ORGANIZATION SUGGESTED BY THE NEEDS AND THE CAPACITIES OF CHILDREN THAT VARY FROM THE STANDARDS SET FOR AVERAGE PUPILS

D. H. CHRISTENSEN, SUPERINTENDENT OF SCHOOLS, SALT LAKE CITY, UTAH

Dr. Chadsey has asked me to speak to you on "original and suggestive work in the Salt Lake City school system along the lines of what might be called the unusual." The rather pretentious topic assigned suggests the line of thought that I shall attempt to follow. While our movement is not original, it may have a few distinctive features. At any rate, it has been inaugurated to meet a condition and not to substantiate a theory.

In the discussion of this subject I shall for convenience divide it into three distinct sections, each one of which will deal with a department in which in our schools there is a well-defined, purposeful movement.

In the first section I shall consider the preparatory school which includes within its scope seventh, eighth, and ninth grades, and which may with propriety also encompass the tenth. It provides for some elective work, but not for the purpose of specialization.

The department has been established in recognition of the right of the child, even the "unusual" child, to receive from the school the kind of training best suited to his needs and capabilities. To secure harmonious relationship, the course of study must be adapted, not the child. Any change that the child undergoes must be growth and not adaptation to artificial standards.

In the second section the function of the ungraded room in serving the purposes of the child that is above or below the average in his class will be discussed. The department looks quite as much to the interests of the bright, precocious child as to the interests of the slow, backward child. It is not, however, intended for the mentally deficient or subnormal child. When discovered, he is transferred at once to the school for backward or mentally deficient children, which is the third section for consideration. The school for these deficient children is centrally located, and they are transported to it at the expense of the Board of Education. It is used exclusively for this type and is, in part at least, a laboratory as well as a school. The head of this institution has been especially trained for his work, and his assistants are teachers selected because of their pronounced fitness for this class of work.

These three departments, it will be seen, are so varied in their combined scope as to provide a place for every child that does not belong to the large group of children whose interests are well guarded in the regular classroom.

THE PREPARATORY SCHOOL

It is manifest to all students of the school curriculum that the difficulty of meeting the needs of the individual child in class instruction increases as he moves upward in the grades. The nature of the prescribed work in primary grades and in the lower part of the grammar department is such as to appeal to the interests of practically every child and to meet his general requirements. His marked personal tendencies and aptitudes begin, however, to assert themselves as he passes thru fifth and sixth grades, which in so many respects represent a transition period in his life, and when he enters the seventh grade his natural bent is likely to be easily discerned. In some cases, perhaps the quality of his previous teaching may be a factor in predetermining this inclination, but most likely it is an expression of his own individuality developed under proper environment—the home and the school, and it may be that heredity has played its part. At any rate this condition arises, and who will say that the disinclination to attend school manifested by so many fifth- and sixth-grade boys, which all educators recognize and which has had voluminous discussion from many leaders in educational thought, is not due in part, at least, to the fact that the prescribed work in seventh and eighth grades, which under present conditions has so little regard for individual aptitudes and inclinations, is too restrictive in its scope and fails to appeal to them? Germany in her splendidly organized system has long since taken cognizance of individual proclivities and needs and has provided elective work with certain well-guarded restrictions as early as the third year. We cannot hope to begin so low in the grades, even if it were desirable, but the opportunity for some degree of choice should be given at the beginning of the seventh year. Every year it is necessary, in the interests of justice and fairness, to promote to the high school some pupils with a "minimum" mark in some subjects and a "condition" in others. The minimum subjects are supposed to be those for which the child has a minimum capacity and in which he cannot even with faithful and persistent effort reach the degree of attainment required for promotion. They are always, however, the ones for which he has a dislike and the ones in which little interest is aroused. The requirement that makes it compulsory for him to pursue these studies frequently results in a permanent aversion to them, whereas a temporary discontinuance of them during a period of development of one or two years would likely bring the child to the place where he not only finds pleasure in pursuing them, but where he can do so at a much smaller expenditure of energy and with decidedly better returns than would formerly have been possible. I would not include in this class those branches the necessity of which as fundamentals all recognize. It is, however, in no way rare to find a bright and promising young girl forced to the point of failure and subjected to constant humiliation in her arithmetic, when her reading and language work give unmistakable evidence of an unusual intellect. The constant dread and the humiliation caused by her low standard of work in arithmetic not only rob her of the charm and delight of her school days, to which she is justly entitled, but her efficiency in the subjects in which her aptitudes are pronounced is perceptibly lessened. And then, too, it is not improbable that the constant worry consequent upon the doing of that work for which such a child has a natural aversion, an aversion which the best teacher cannot overcome, may have an adverse effect upon the health of the pupil, especially the girl who is just entering the adolescent period of life. Experience shows that many of such pupils during their seventh and eighth years—and here I have in mind particularly the girls—can distinguish themselves, and at the same time realize the maximum of pleasure in the effort, in the study of languages, particularly modern languages.

Our experience shows that these younger children acquire a vocabulary with surprising quickness and ease, they master idiomatic forms of expression readily, and they get a better foreign accent than do the older children. And above all else they find a pleasure in this work that more mature students seldom experience. They talk and read within the range of their acquisitions from the initial lesson. Grammatical forms are considered only as occasion arises for their use. Every new word or idiom learned has an immediate and, so far as possible, a constant application.

Unfortunately, the teaching of languages has by some been considered the exclusive function of high schools, when, in fact, the very nature of mind development makes an earlier period in life the more economical and effective time for their acquisition and mastery. The arithmetic work outlined in seventh and eighth grades, if it must come some time, can in some cases be done more effectively and in a shorter time later in school life, when more experience has been acquired and when a more mature development has taken place. Some parts of history, of civil government, and of grammar now included in the eighth grade might well be moved to the ninth grade, and some of the science and the English offered in the first year of high school could be at least as effectively taught in seventh and eighth grades. It is, then, a safe and conservative position to hold that the interests of the individual child require the overlapping of the course now outlined for the first year in high school and the work prescribed for the upper part of the grammar department, and that the resultant must be an improvement in grammar-grade work, and an added efficiency in high-school work because of more effective instruction in the ninth grade (freshman high-school year) and consequently a better equipment for the second year of high school and the work that follows. A condition that would enhance the pleasures of school life and also likely prolong it, is not to be overlooked.

In reorganizing the remaining part of the high-school course it might be advisable to extend it to three and one-half or make it even as it now is—four years—but even that necessity would not invalidate the argument for the reorganization of the work of seventh, eighth, and ninth grades on the lines indicated.

THE UNGRADED CLASS

From the nature and scope of a course of study it is based almost entirely upon the need and the capacity of the average boy and girl, altho it must be admitted that the interests of the child above or below have not been entirely overlooked. But in school organization in the regular classroom an effort is made under conditions not altogether favorable to provide a condition that will permit the teacher to eliminate, in a measure at least, the exclusively group or class plan of instruction. This tendency finds expression in her conscious effort to adapt her instruction to individual needs in the course of the development of a subject. For the thoughtful, carefully prepared teacher, this task is not difficult when she is dealing with pupils whose rank and capacity place them within close range of the average child, whose group, by the way, consists of the major portion of the class. The difficulty, however, is greatly enhanced when some of the children, by reason of exceptional native ability or development or because of limited capacity, are much above or below the class standard. It will be noted that a period of development represented by one semester or a half-year separates each class from the one above and the one immediately below, and consequently the variations from class standards must be found in the intermediate ground or else they would naturally fall into another group. An effort to adapt the teaching to the needs of the few advanced children places the instruction beyond the full grasp of the major portion of the class and interest on their part will necessarily lag and the possibilities of the recitation must be greatly minimized, while the endeavor to move on the plane occupied by those low in the class rank will fail also to appeal to the majority and results are again unsatisfactory.

The pupils of a class a month or two after the beginning of the semester may then be resolved into three groups, at least two of which are found in most rooms:

1. The middle, group including those that are of average rank and also the ones just below and immediately above the class standard. In this section we usually find from 60 to 90 per cent of the children. In fact, this group may include the whole room. For

reasons that are evident, it is not unusual for the entire 2B class to belong to this group during the first semester of the year.

2. Those farther below the class standard than the ones already listed. These children again fall naturally into two groups: (*a*) the older, more mature children who have been promoted because they have met the "time" requirement in the class below and have been regular in attendance and faithful in work, but whose capacity for development seems limited at present; and (*b*) the ones who have at least average ability but who are behind because of irregular attendance.

3. The pupils in advance of any in Group 1. It is not likely that Group 3 will have in its membership any below the average child of the class in mentality, because it is probable that if such slow child were above the average of his class in development and in his acquisitions he would be given the benefit of all reasonable doubt and be moved into the low or the average group of the next class, where he would find an environment better suited to his needs. In Group 3, however, may be found several subdivisions, especially in the latter part of the semester: (*a*) the precocious child who is in the habit of outstripping his classmates; (*b*) the retained child who has fallen behind because of irregularity or because of lack of effort, but who has resolved now to make a "special"; and (*c*) occasionally the once seemingly sluggish child whose powers, for reasons that baffle the teacher and parent alike, begin to unfold at an unusual rate of development.

A room in which all of the pupils at the beginning of the semester appeared to belong to Group 1, may soon, in spite of a conscious and well-directed effort on the part of the teacher, give evidence of a membership in the upper and the lower groups. Sometimes they seem to appear simultaneously, but generally, tho not necessarily always, the lower section shows itself first. This priority is due to the fact that the membership of the lower group, if it have any, is responsible to already existing, but not necessarily discernible, causes. Membership in the advanced group is usually determined by causes arising as the work progresses. A well-taught room is likely to develop an ever-increasing tendency toward the upper classification and a decreasing one toward the lower.

But the cause of this multiplicity of such classes in the modern graded school is of interest and value only as it aids the effort to meet and solve the problems that naturally arise. And the problem of most vital concern is that relating to the environment and instruction best suited to the needs of the children materially above or below the class standard. The so-called ungraded room into which such children are brought for individual instruction and study, for such time as their interests may require, has demonstrated its suitability over the regular classroom. Frequently after a few weeks' training some of such children advance until they meet satisfactorily the requirements of the next advanced class, while others move upward into the middle or normal group of their own. As they pass out, new candidates come to take their places, and thus the ungraded room has an ever-changing enrollment. The experiment of the ungraded room in this city has been tried enough to prove its place in our scheme of education, the aim of which is to reach and to serve the interests of the individual rather than the mass.

Reports of the work in several classes gives some interesting points.

SUMNER SCHOOL

The ungraded room certainly does not lack variety in the class of pupils which gather within its walls. These pupils, I think, might be divided into three groups: (*a*) those who with a little help and guidance can easily do the work of the higher grade; (*b*) those who are behind their class on account of enforced absence; (*c*) those who find great difficulty in keeping up with their class on account of their inability to grasp one of the fundamental subjects.

The class first mentioned come to the ungraded room as permanent pupils for the space of time required for them to catch up to the higher class. They go to their own rooms for music, drawing, and spelling so that their day's work is not too monotonous. The remainder of the time is devoted to the fundamental subjects which they must know thoroly in order to do the work of the advanced class. In the higher grades these subjects are geography, grammar, and arithmetic; in the intermediate grades language takes the place of grammar, and in the primary grades reading is very important.

It is a great pleasure to work with these pupils, for they are very appreciative and so eager to get every point needed. That they are very anxious to show us that we made no mistake in choosing them for a special promotion is shown by the number of times they later call on the ungraded teacher with their monthly reports and their marks received in tests. The mid-year tests show that our pupils who made special promotions this year are very near the head of the lists.

The second class usually need but little attention given to them unless they have been absent for a very long time. These are not permanent pupils but come to the ungraded room for one or two periods during the day at such times as they can best afford to miss the work of their own rooms—usually at study periods. Glad of this opportunity of keeping up with their class, they willingly do at home the preparation work missed in their rooms. When they have mastered the important points needed they are again full-fledged pupils of their class.

The last class is really the one that does the hardest work, for these pupils are trying to master a subject which probably has been hard for them during their entire school life. The explanation given in class on a subject in arithmetic or grammar which the majority of the class readily grasp, they do not understand, and if given no extra attention go on to the next subject with only a hazy idea of the one just passed. In the ungraded room with fewer pupils they have the opportunity of personal attention and are very helpful to the teacher by frankly stating what they do not understand. In some ways this is the most discouraging part of the work, as there are some pupils, notwithstanding our best efforts, who will never be equal to the average pupil in all subjects. We have had five children in our school from one family not one of whom could get a good understanding of arithmetic. In such cases one's only consolation is that they might not do even so well without our help as they do with it.

In this latter class the ungraded teacher sometimes finds pupils doing unsatisfactory work in a subject on account of some error, the righting of which puts them among the best. A fourth-grade boy could never get a correct result in his multiplication problems altho he knew his tables perfectly. Watching him I found he added *one* every time he had a number left over to "carry" to the next product, whether the number that should have been added happened to be six or eight. He was delighted to find where he made his mistake and that removed all his difficulty in multiplication and long division. Another, learning long division, constantly made mistakes in his subtraction, altho he never made a mistake in a problem given as a subtraction problem. When asked about it, he said that he always thought one had to subtract in some different way when doing a problem in long division. These are but examples of the mistaken ideas that children get, and the ungraded teacher working with fewer pupils has a much better chance of finding these mistakes than the regular teacher with a larger number of pupils.

These pupils are anxious to get aid and often ask for extra work to take home that they may bring it back in the morning for correction.

Number of pupils given special promotion and now doing regular work in advanced class: 4A, 1; 5B, 2; 5A, 2; 6B, 3; 6A, 2; 7B, 6; total, 16. Many are leading their class.

Number of pupils who, because of special help, were able to be promoted at the close of the first semester: 3B, 1; 3A, 9; 4B, 24; 4A, 7; 5B, 16; 5A, 9; 6B, 11; 6A, 20; 7B, 9; 7A, 15; total, 121.

VIOLET WHITWORTH, *Teacher*

WHITTIER SCHOOL

I submit the following report of the results obtained in our ungraded room for the first semester:

The total number of pupils taught is 121. The number of pupils receiving help in the various grades and thereby succeeding in making regular promotion to the next grade is 60. And the number of pupils receiving special promotion is 39.

The object in our building during the first term was to meet the immediate need of the pupils, enabling them to do their regular work more intelligently and thereby to make their regular promotion more probable. Phonics, reading, spelling, and arithmetic were chiefly the subjects taught.

The work has reached pupils ranging from the 2A class to the 7B class.

The original plan, and the one pursued for the first term, was to give help to pupils in the various grades who were weak in one or perhaps two subjects. These pupils reported to the ungraded teacher at a time when their regular work would be the least affected by their absence from their room. The classes usually varied from one to five in number, and were made up of nearly all primary pupils. It was soon discovered that large classes defeated the very purpose of the work by reducing the personal contact of the teacher.

The second term the plan was materially changed. The morning session was wholly given over to grammar grades and the pupils remained all the forenoon. The pupils were those over-age and those who with special help were able to make a special promotion. Arithmetic, language, and reading were the subjects mainly taught. Undivided attention, application, and perfect deportment became the law accompanying all these special privileges.

The pupils who took the work, especially those who were given the opportunity of making special promotions, grasped the opportunity with great eagerness and continued thruout with the spirit of earnestness. Within a few days a new light of purpose and intent could be read on their faces; this was very marked in some cases.

As a result, personal endeavor and application, mental alertness, and a new interest in school have been awakened. Standards for promotion must be carefully maintained by both teacher and principal and inestimable good will result to the individual child enjoying these opportunities given by the ungraded room.

ERNEST E. H. SCOTT, *Principal*

EMERSON SCHOOL

In my report to you on our ungraded room, I wish to state that no teacher in our corps is rendering greater service to the system than is our ungraded teacher.

In almost every grade, we have pupils who have come to us from other systems and who are perhaps equal in strength to the others of the class, but owing to some differences in the work pursued in different systems, these pupils need individual help along certain lines in order that they may work well with the class.

Not infrequently along the line, we have pupils who from various causes are behind their grade in one subject. The ungraded room furnishes the remedy in these cases.

Another case in which the ungraded room has proved of great benefit is that of the apt pupil who, by means of this assistance, is enabled to shorten his course to the high school.

Then comes the timid child, the child of peculiar temperament or disposition, and the nervous child, all of whom have received help in the ungraded room.

Owing to our ungraded room, the number of retained pupils in our school has been reduced at least 50 per cent.

Mary Dysart, *Principal*

DEPARTMENT FOR BACKWARD CHILDREN

The sphere of the preparatory school and the ungraded room has now been considered. These departments provide a place for the normal child who shows an appreciable variance from the class standard set. Some of these pupils are above the average child of their grade and some below, but all of them are capable, at least so far as we can determine in advance of a careful individual study, of moving eventually into and thru the high school, altho those in the lower stratum will require more than the allotted time. But there is still another group—a small one, to be sure—one in which the members are deficient mentally, some bordering on idiocy. Unfortunately, but few states have made provision for them. They do not belong in the mental hospital, and justice forbids that they be excluded from the benefits of the public school, until such time at least as the state provides for their care and training. However, these children have no place in the regular classroom. All are a direct hindrance to the progress of the other children and a few are a menace to the welfare of the other pupils. For their own sake and for the sake of their associates they should be segregated from the other children and brought together in an environment especially suited to their own needs. The course of instruction for such children must be quite narrow in its scope, and it should aim largely to give motor and sensory training. Whether the lower types should be taught reading, even if possible, is open to grave doubt.

A very conservative estimate places the number of feeble-minded persons under 21 in Salt Lake City with a population of less than 100,000 at least as high as 70 and the number is likely nearer 200. In this estimate I am including only the marked types of feeble-mindedness. The proportion is equally as large in other parts of our country and statistics show that the percentage is much greater in some places. Including all children that show three years or more of retardation, which condition is made the basis of classification by some clinicians, the number is greatly increased. It is estimated that in England and Wales one out of every 250 persons is feeble-minded and that the proportion of insane is nearly as great. The percentage in America is in all probability as large. Dr. Fernald says: "There are at least 200,000 pronouncedly feeble-minded persons in the United States. Of these, 16,000 are inmates of almshouses, while only 18,000 are cared for in special institutions."

Our department for mentally deficient children does not aim permanently to care for the lower types of feeble-minded children. Thru the combined efforts of the expert in charge, the psychologist, and the school physician, we hope to be able to secure sufficient reliable data in each case to enable us to classify the children into two general groups—the imbecile and the moron. It is not likely that the lowest type—the idiot—will reach the classroom.

But the type of feeble-minded children classed as imbeciles has no permanent place even in the special school. It is evident that most, if not all, of these are hopelessly deficient. Their proper place is manifestly in a state institution established, organized, and conducted for their type only. It is hoped that our special department may help to crystallize public sentiment to such extent that a state legislature in the very near future will take cognizance of this great social need, and permanently exclude the imbeciles from the unfortunate privilege now enjoyed of commingling indiscriminately with the community at large.

Accurate and reliable statistical information compiled by eminent authority proves most conclusively that the feeble-minded perpetuate their kind in alarmingly increasing numbers and thus add unnecessarily to the social problems and the criminal records of the future. It is evident to the careful student that heredity is chiefly responsible for the appalling increase of the feeble-minded, including the imbecile and the idiot. Unless precautionary measures be taken in the form of segregation and permanent exclusion, society will ere long have a greater burden in satisfactorily adjusting conditions than can easily or comfortably be borne.

In attempting to care for the lower type the public school cannot meet the needs of society. The state must receive him and care for him kindly and tenderly during his natural life. Any attempt to care for the feeble-minded in an institution that is organized and maintained as a hospital for the care and treatment of the insane is not likely to meet with unqualified success. Sentiment in matters affecting human happiness cannot be ignored, and frequently it proves callous to cold reason.

That segregation and permanent exclusion will prove to be for the common good will be, I believe, generally admitted. But several cases showing the penalty of neglect are here cited.

A feeble-minded girl of only thirteen, whose being encompasses the unbridled sensuality of the degenerate and the cunning of the savage, has already polluted the morals of at least twenty boys, most of whom might otherwise have passed thru the adolescent period of their lives without the surrender of their self-respect.

Another but several years older has bequeathed to society two illegitimate children, both of whom appear to have combined in their natures the traits that distinguish an idiotic mother and a criminal father.

Two parents are known to their charitable neighbors as "harmlessly silly" but "well meaning." The father does the commonest kind of menial labor and thus earns a meager livelihood for his family, while the mother discharges apparently acceptably her domestic duties in their modest home.

Several sons have resulted from this union. In each case nature has imposed a woeful restriction on the mental capacity. Years of painful plodding on the part of the child and even more painful effort and patient devotion on the part of the teacher have brought a reward that approximates the attainment of a normal child at the end of the first year. Disciplinary problems with each of these children, whose subverted natures have been ruled and guided by a type of intelligence that apparently can be responsive to that environment only which appeals to the lower instincts of human nature, have been both numerous and various. Their possible acquisitions measured in terms of school work seem to be circumscribed by a little less than the first two grades.

And then the expense! Reckoned in the least significant form—dollars and cents—it has exceeded several times that paid for equal advancement of a normal child. A greater cost has come in the lessened efficiency that results in a room where the subnormal child associates on terms of equality with the normal child. His presence cannot but have a depressing effect on the youthful aspirations of the other children. His moral standards—if he have any appreciable ones—are low and his presence contaminates. And then, after all, what has been gained? To the individual, it may sadly but truly be measured in negative terms. He may be, and in fact is likely to be, a less efficient member of society, because the school has attempted to do that which, from its very nature and purpose, it cannot do. And the school itself in its vain attempt to accomplish an impossible task has sustained a loss that cannot be designated as a negligible quantity.

The older of these boys are now approaching manhood, and unless their unfortunate tendencies fail to assert themselves in what seems to be the natural way, the greatest cost is yet to come.

With the commitment, then, of the imbecile and the idiot to a state institution, the department for backward children has a field rich in promise in the training of the moron, or higher type of feeble-minded child. The scheme of instruction or "treatment" must embody within its scope a careful and thoro individual study of the history of each case by the trained expert with a view to prescribing a line of instruction or treatment (possibly surgical) calculated to remove or at least to lessen the cause of the deficiency. In our experience some cases have been so completely "cured" as to justify transfers back to the regular classroom and others have had their capacity for development so greatly improved as to render the services of the special school quite effective.

In the consideration of environmental causes of some lighter types of mental deficiency, comparatively few in number and practically all responsive to the right kind of training, I am constrained to place an indictment against the school.

Is mental deficiency of the lesser type a by-product of the American school? To some degree at least, and in a very serious way, this seems to be true. First, in a negative way, as a kind of sin of omission, the schools seem to be responsible, by failing to provide possible and practicable educative means readily at hand for the elimination and lessening of mental deficiency; and secondly, in a positive way, as a kind of sin of commission, the schools seem to be responsible, first by refusing in an aggressive way to permit the child to obtain at will the kind of training which might stimulate normal mental development, and, second, by forcing upon the child a kind of training which by its very nature is mentally stunting in its necessary effects.

The first phase of the problem here suggested has to do with the child who is of recognized normal mental capacity, but who is just enough below the average in mental ability to be habitually unsatisfactory in scholarship and occasionally failing to pass in his class or grade—altho at the same time he may show continual progress under regular class instruction, however slow or even sluggish it may be. Many of such children, who possess normal mental capacity but display subnormal mental ability, have been brought up to grade, to a standard of satisfactory scholarship, by means of individual instruction and attention.

The second phase of our proposed problem has to do with the child, not of recognized normal mental capacity, but with the child who is apparently subnormal in mental capacity—the child who is not only mentally deficient but who is seemingly mentally defective—the child who is practically at a standstill in school progress, and who is incapable of being restored to normality even by the individual instruction of the ungraded class.

This class of children may include some of the lower grades of the merely backward type, but, in the main, is made up of what is now coming to be termed the high-grade feeble-minded, or "moron" class of mentally deficient children. They are to be found stranded in the lower grades, anywhere from the first to the fourth grades; occasionally, because of size and age, they are permitted to be in the fifth grade; in rare instances for the same reason they are allowed to sit in the sixth grade.

Suppose that a child of normal mentality were retained in the kindergarten, year after year, from four or five years of age until twelve or fourteen years of age. What would, manifestly, be the result? Associating with little children, being treated as a little child, and consequently thinking, feeling, and acting as a little child during a period of several years, the pupil at first thought could scarcely be imagined as turning out in any other than one definite way; namely, stunted in general mental development. Should not his habits, thru years of repetition, become so crystallized into permanent traits of character as to present a case of extremely retarded development? Would not his reactions be the same as those of a typically high-grade feeble-minded child?

Upon further consideration, we might say that the result in our illustration would vary more or less according to the nature of the environmental experiences of the child outside of his long detention in the kindergarten. But, supposing that these experiences were about the same as those of an ordinary kindergarten child—playing with children of kindergarten age, doing the things that kindergarten children do, and treated by adults as kindergarten children are treated—then could the outcome possibly be other than that indicated?

Have we not here an essentially homologous case as compared with actual cases of mentally deficient children who are for long periods detained in primary grades, with primary children, and under primary treatment, until they become of grammar-grade age and even of high-school age? Were children of normal mentality thus detained in primary grades, would not the necessary result be the same as in our illustration, or, if any difference, would it not be only quantitatively different and not qualitatively different? Would they not in their youth be childish, foolish, or children not grown up, as, indeed, the defective child of arrested mental development really is?

Is it not possible that many so-called defective children at the beginning of school are subnormal only in the fact that they have not the same degree of aptitude for scholastic learning as the ordinary child; or in other words, that they have not the native memory retentiveness for the symbols of language and number? And, furthermore, is it not possible that most of the other traits of mental defectiveness, such as poor judgment, lack of initiative, weak power of concentration, want of serious purpose, indifference toward the responsibilities of life, extreme credulity, simple and indiscriminate responsive affection, and other such qualities as are habitually displayed by the childish, the foolish, the feeble-minded—is it not possible that some of such traits are merely the outgrowth of their detention in the primary grades where the normal habits and attitudes of little children become crystallized into permanent traits of character?

Let us suppose that a child of normal mentality, beginning school at the ordinary age, were forced thru all the branches of the common-school curriculum in four years instead of the customary eight. What would, manifestly, be the result? Could it be anything else than a chaos of scholastic mental confusion, as would be expressed by the most absurd and pathetic mixtures of half-assimilated memory facts?

Is it not possible that some of the mentally defective children in our schools are also largely the outgrowth of an ill-adapted course of study thru which they are taken at a rate and in a manner totally out of harmony with the developing nature of the "unusual" child, or the average child? Let us keep in mind that the defective child is from the beginning in a class that is in scholastic advance of his own mental development; and thus in the regular classroom he continues during his entire school life to be improperly classified.

This discussion leads us no farther than to the somewhat reasonable conclusion that some grades of mental deficiency may, in part at least, be the products of wrongly adjusted courses of instruction; i.e., courses wrongly adjusted for subnormal children.

Be it observed, however, that this reasonable possibility is not claimed for all cases of mental deficiency in the schools, nor is it claimed, at present, for any particular percentage of the subnormal children. On the contrary, it is readily to be admitted that there is unquestionable and abundant evidence that certain cases of mental defectiveness in the schools, particularly those bordering on imbecility, are the products of hereditary influences, or generative conditions, or traumatic injuries, or other causes entirely foreign to the school; and that the defectiveness thus caused continues incurable whether the child attends school or not.

In the fall of 1910 the head of the department for backward children in the Salt Lake City schools made a preliminary survey of conditions in the schools, spending two months in the work of examining all extreme or serious cases of pupils whose retardation had been observed by teachers and principals. As a result of this investigation, several notable things were discovered. One observation in particular, which seemed to be a distinct contribution to the problem of mental deficiency, was this rather surprising condition: Mental deficiency in any individual is evidently not integral; it is fractional. That is to say, contrary to the generally accepted theory, it was found that the mind is not defective as a unit in its sociological reactions; and that, on the contrary, the mind might be extremely defective in one field of sociological reactions and at the same time entirely normal in other large and complex fields of sociological reactions. For example, a child might be arrested in school progress and be extremely defective in scholastic ability, but, at the same time, such child might be normal or even supernormal in social development, or in vocational ability, or in ethical habits, or in religious sentiments.

From the observations made, it seems unfair to say that a child is mentally deficient, when in fact he is only scholastically deficient, and when he might have normal or even supernormal mentality in other fields of sociological adaptation.

Later in the school year 1910–11, a more intimate acquaintance with the subnormal children, thru personal contact with them, as a teacher of special classes, revealed a possible explanation as to why there appeared to be no uniform relation between development or retardation, scholastically, vocationally, socially, ethically, and religiously; and also revealed a possible explanation as to how the school might be the cause of mental deficiency in some cases and in other cases of subnormality have little or no injurious influence.

In his report to my office the head of this department says:

> It was observed that the most pronounced cases of mental defectiveness in the schools, and those whose deficiency came nearest to affecting the mind as a whole in all of its

> psychological and sociological reactions were, as a strikingly general rule, those pupils who had been the longest in school, the most regular in attendance, the most industrious in their efforts to learn, and the most trustworthy in deportment. And, on the other hand, it was observed that the less pronounced cases of mental deficiency in the schools, i.e., those that, while being defective scholastically, came more nearly to being normal socially and vocationally, were those pupils who (1) had been very irregular in school attendance, or (2) had practical vocational experiences outside of school, or (3) had been incorrigible and mischievous while in school.
>
> Thus it appeared that mental deficiency among subnormal children varied directly with the extent to which they came in contact with the school—mentality being inversely proportional to the environmental influence of the school—and the degree or extent to which the school seemed to retard mental development being measured by the ratio which the influence of the school bore to environmental influences outside of the school.

Personally, I have been unable yet to confirm these rather startling statements, but they are made by a careful, conservative, and capable department head.

In conclusion, I may with propriety say that school systems which still hold exclusively to the method of "mass" instruction, and provide no means for individual attention for the pupil of habitually unsatisfactory scholarship, are culpably responsible for an educational waste, because they fail to utilize the practical and inexpensive means readily at hand for the elimination, or partial elimination, of this milder type of mental deficiency.

In the process of adaptation necessary for effective teaching, the course of study must adjust itself to the child and not the child to the course of study.

E. A REORGANIZATION OF OUR SCHOOL SYSTEM

J. H. FRANCIS, SUPERINTENDENT OF SCHOOLS, LOS ANGELES, CAL.

In the interests of economy I am convinced that the best results may be obtained by a brief and direct description of what we are attempting to do in Los Angeles in the way of reorganizing our school system.

It is to be understood that the plan is not to be dubbed the Los Angeles Plan. I do not know how many other cities are attempting the same things and with what results. Recently someone mailed me a copy of an address by Edward Van Dyke Robinson, University of Minnesota, on the reorganization of the graded and high schools. I did not learn who this kindly disposed but unkind friend was. Since reading it I am certain that I shall practice plagiarism in this paper and upon future occasions. In fact I discover that either he or I have been at it in the past, for I might well content myself with calling your attention to his address which has been published in pamphlet form and which fully covers the points involved in this discussion.

OUR PLAN

The plan toward which we are working in our city, broadly speaking, follows:

1. One to two years in the kindergarten. Our state law compels the admittance of children to the kindergarten at a tender age, a prophecy of the days when the nursery shall become an integral part of the public-school system. This ofttimes results in a child's spending more than one year in the kindergarten, and in turn raises serious questions concerning kindergarten methods and content of work.

2. Six years in the elementary schools, assuming responsibility for the physical, mental, and spiritual development of the child between the ages of six and twelve. Because of economic and social conditions and principally because of the wicked folly of educators hiding behind the gray old fallacy of conservatism, this age limit too frequently reaches thirteen, fourteen, and even fifteen, thereby robbing the individual of the most sacred things in all the worlds that be—his hidden pride and confidence in the efficiency and power of his own personality. Fortunately the boy, for it usually is a boy, finds some sort of deviltry in which to give expression to this personality and thereby retain a portion of it which his good sense may later lead him to turn into legitimate channels.

3. Three years in the intermediate or junior high school, which, if the child has been fortunate, submissive, and not too individualistic, may be completed at the age of fifteen, covering nine years of school work.

4. Five years in the high school, which brings the student to the age of twenty, a good average age to begin the business of life despite the philosophy of my friend President Benton who holds we should remain infants until twenty-one years old.

SUPPLEMENTARY ORGANIZATIONS

This general outline of work designed to meet the needs of the largest number of American boys and girls is supplemented by:

1. The trade school, admitting pupils according to physical development irrespective of academic attainments.

2. Continuation schools open before and after school hours, offering work in manual subjects and optional with the pupil. This work we hope soon to enlarge and include in it music, art, mechanical drawing, and public speaking.

3. Vacation schools during the summer months, open in the forenoons and designed to conserve two purposes: (*a*) to occupy the time of younger children in music, folk dances, play, gardening, natural language work, drawing, and manual arts. Since this is development work, no effort has as yet been made to join it onto the regular system, which, if it ever was meant to be developmental, has degenerated into a scramble to furnish the child with an education by passing him from one grade to another until there are no more grades to conquer; (*b*) to furnish regular academic work for those who wish to make up previous failures or secure the coveted official certificate in subjects yet to be taken before they can be vouched for as

educated young men and women. Since this work is both uneducational and undevelopmental, it adjusts itself excellently to the regular scheme and has great advantages as a time-saver and hope-preserver. Many pupils return to school in the fall with new courage because they are up with their classes and can see the end ahead. These schools also keep pupils off the streets and out of more unprofitable occupations and save the city money in carrying them an unwarranted length of time in the school system.

4. Night schools for all grades and for all classes of people. But few phases of our school work have greater significance than this one. Purpose upon the part of the individual pupil, so lamentably lacking in the regular school, is a prominent characteristic here. If this nation has one prevalent danger it lies in the number of her school children passing thru school just to be passing thru, wholly lacking in intelligent or worthy purpose.

5. Special schools for the unsocialized individual who refuses to adjust himself to the regulations, formalities, and conventionalities of the schoolroom. These schools are the eddies into which the driftwood of the school system may gather and be treated until sufficiently seasoned to risk again in the educational current. They are necessary and strikingly convenient.

6. A liberal use of the ungraded room, which is but a tardy recognition of the fact that since some children will differ in essential particulars it is folly to subject them all to the same educational treatment and expect them to assimilate all its ingredients with equal facility and profit.

7. The social center, not yet a year old but a very promising educational youngster.

SIMILARITY TO THE GERMAN PLAN

Similarity of this to the German plan is to be frankly conceded, which leaves a beautiful opening for the American patriot to orate on the virtues of the American and the defects of the German system. The German system, however, should not be adopted for our needs but adapted to them. There must remain one fundamental, vital difference between the present German and the future American plan. The latter must have no blind alleys, and her educational cross-roads joining the main highways must be kept in as good condition as the highways themselves. This becomes possible with the assumption that the coming generation of American educators will cease to be frightened at the imaginary chasms between these highways, and discover that a good traveler who has been moving on his own steam upon one will need fear no great hardships or difficulty in traveling on any other. This also suggests the other significant difference—American vocational schools can no more afford to sacrifice the so-called liberal studies than can academic schools afford to eliminate constructive and applied work.

THE INTERMEDIATE OR JUNIOR HIGH SCHOOL

According to the topic printed on the program this paper should concern itself principally with that part of the school system covering the work of the seventh, eighth, and ninth grades done in the organization known as intermediate or junior high school. At present we have five such schools in Los Angeles, enrolling approximately three thousand pupils. We expect to increase this number until all the pupils of these grades shall be accommodated in schools of this character. Four of our intermediate schools are five months old and one can boast a year's experience. Three uniform courses are offered in each of them: a general course, a commercial course, and an elementary industrial course. These courses are planned with two classes of pupils in mind: (*a*) those intending to enter the high school and (*b*) those electing to leave school at the end of the ninth year. Both are given full tenth-year standing in the high school.

In attempting to plan work for these we also concern ourselves with the individual independent of what he intends to do or where to go. This, of course, is the age-old problem and the fundamentally important one, likewise the one most poorly solved.

In the seventh year one option and in the eighth and ninth years two options are allowed out of a group of six or seven studies.

WHAT IT WILL ACCOMPLISH

For the pupil going thru the intermediate school we expect to accomplish the following:

1. An ability upon his part to do some thinking that may be more or less his own, probably less. We concede that this is ambitious and may have to be content with limited results. Slight results, however, will be refreshing and give hope. Doubtless American boys surpass those of all other civilized countries in their willingness and ability to do things and in their unwillingness and incapacity to think logically, consecutively, and deeply. In this latter the American boy is surpassed, if at all, only by the American girl, with honors close. The cause is easy to discover. The system and not the child is at fault. We have been asking the pupil to recite what he has just read from the pages of a textbook that never should have been published and never would have been save for the money there is in it. The lesson begins on page ten and ends on page twelve and except for these pages it begins nowhere and ends at the same place. The pupil's passing thru the grade rather than passing the grade thru him has been emphasized until it has become the main problem. Since this is accomplished thru satisfactory recitations, the stereotyped, formal, and deadening recitation in turn has become the important activity of the average schoolroom. Real thinking is of minor consideration. The time, energy, and life wasted in recitations in the American schoolroom would serve as the comedy of the ages were it not the tragedy.

It might be legitimately asked how the intermediate school can improve upon the grade schools in inducing pupils to think. The reply must be qualified, but a specialist who is supposed to think more deeply on his particular subject must be conceded to be better prepared to lead his pupils to do the same.

2. To accustom the pupil to departmental work and hence to prepare him for high-school methods. The educational death-rate in our ninth year or first year of high school is alarming. This again is easily explained. The pupil who has enjoyed the maternal care of a conscientious teacher who knows his strong and weak points and is equally well known by him enters a great high school and becomes lost. There is no one to look after him to tell him when to get his lessons and how to conduct himself. The change is too sudden and too violent. He fails, becomes discouraged, and drops out. Our experiment so far has resulted in 18 per cent of ninth-year intermediate pupils failing in one or more subjects as against 42 per cent in the same grade of our high school.

The pupil in becoming accustomed to, also enjoys the advantages of, departmental work. These are incomparably great compared with the old plan of one teacher for the entire curriculum. The mother-teacher idea belongs to the pre-adolescent child. Adolescent boys and girls are entitled to learn from those who are masters of what they teach. This is impossible when one person is required to teach arithmetic, geography, history, literature, language, science, penmanship, music, art, ethics, hygiene, agriculture, needle-work, etc., the *et cetera* to include those subjects which may have escaped my memory. Specialists and specialization offer serious problems in education but they are not hopeless ones, as are those presented by the unprepared teacher. Teachers are not at fault. They are the victims of a system that demands the impossible of them. Nor can departmental work be brought to its highest efficiency under regular grade-school conditions. On account of lack of numbers of equal grade, diversity of interests running thru so many grades, intricacies of programs, and attitude of principals and teachers, departmental work in the grade schools meets with unnecessary difficulties.

3. The intermediate school conserves the time and interest of the pupil. Six years is sufficiently long for the mastery of the arts. The last two years of grade-school work occupies itself naturally with repetition. An attempt has been made to enrich these years by the introduction of new material. The result has been an educational hash. The number of young people lost to the schools, thru lack of interest in their work caused by repetition or by work superficially done, is a startling commentary on the wisdom of school men and women. The adolescent youth begins to inquire, reason, and judge, and he must have material upon which these qualities of mind may feed.

Of all the inexcusable follies to be chalked against us as teachers, possibly that of compelling the child to repeat the work of an entire grade because of failure in one or more subjects is the most glaring. It is possible to avoid this in the grade schools, but inconvenient. This inconvenience is the main cause for the practice, altho it is not conceded to be so. In the intermediate school the practice disappears naturally and necessarily.

I do not hesitate in the belief that under a well-organized system of intermediate schools children will finish the ninth grade at least a year ahead in development, possession of knowledge, and the power to acquire it, of the ninth-year pupil under the present plan.

4. The intermediate school offers to the pupil an equipment and organization not possible under the grade plan, such as science laboratories, well-equipped shops, art and mechanical drawing-rooms, cooking- and sewing-rooms, commercial rooms, music halls, gymnasiums, auditoriums, etc.

5. These schools should develop in the individual social- and self-responsibility at an age when responsibility to society and to self become most important. The theory that the older and stronger pupil of the school should look after the interests of the younger and weaker one is beautiful. It has one serious defect: it does not work. The facts are that the farther our school children progress in the system the less they seem disposed to assume any responsibilities. We are sending out armies of boys and girls, men and women, possessed of the spirit of getting what they can and giving as little as possible in return, the spirit that in social, political, and economic life is a menace to the nation.

Student-government and other student activities should be organized in the intermediate school to offer opportunity and encouragement for the giving of self to a legitimate and worthy cause. Our young people must be taught that it is more blessed to give than to receive.

Too much is being attempted for the child, too little by him. Too many safeguards and restraints, too much protection, advice, and guidance will not result in a race of men and women with the mettle of our fathers and mothers. They developed the real stuff within them thru early sharing the responsibilities of life and playing their part in the game. Somewhere below the university and below the high school we must lead the individual to recognize the fact that the world owes him just what he is worth to the world and he owes himself just what he is worth to himself. This belongs to the period of adolescence, but is very difficult to develop effectually in a school where the pre-adolescent child greatly outnumbers the adolescent. Our grade schools are usually dominated by the atmosphere of the child-world or the world of men and women. It is a rare corps of teachers with a rare principal who succeed in harmoniously blending the two worlds. Much of the lack of interest in, and the dissatisfaction with, his school and most of the bluff and bluster of the average eighth-grade boy are due to his environment which is not in harmony with his nature. The average eighth-grade girl is equally, tho perhaps differently, affected.

6. The intermediate school offers opportunity to secure men teachers for its pupils. As this convention is composed largely of men I leave it to

you to pass upon the merits of the proposition. It should be noted, however, that the plan does not exclude women teachers, and while teaching is not a sex problem it will be conceded that so long as men and women differ widely in their experiences the adolescent mind should come in contact with both the masculine and feminine viewpoint. This is necessary to insure the mental balance of the individual pupil.

7. The intermediate school concerns itself with the child not going to high school. The American high school has grown within the last decade to become the greatest educational institution in the world, largely because it has been compelled to concern itself with the interests of the pupil not going to college. He was the more important because there were more of him. The intermediate school in the next decade will be doing for the boy and girl not going to high school what the high school is now doing for the boy and girl not going to college. It will then surpass the high school in importance because of numbers benefited. The high school in its efforts to care for the boy and girl not going to college has increased the number of college students many fold. So will the intermediate school increase the high-school enrollment. The colleges are coming to recognize that the high-school pupil who is prepared well to leave school at the end of his course is well prepared to continue work in college; so will the high schools discover that the intermediate pupil who has given the most thought to, and taken the greatest interest in, his work is best prepared to meet the requirements of the high school.

The inquiry will probably be raised here of what can be done for the child in the intermediate school to prepare him for life. The reply is anything the system and teacher are prepared to do. The limitations are not in the pupil but in systems and teachers. If the psychologist challenges the statement, I would call his attention to the growth of education during the last quarter of a century, in which time we have witnessed the high schools advancing far beyond what the colleges were then doing and the colleges and universities occupying fields then unthought of. Even the grade schools, in music and art, have far surpassed the dreams of the university enthusiast a quarter of a century old, if there were any at that time. To say that we have reached the limit of the child's capacity is to indulge in academic twaddle. We may be reaching the end of his capacity, but which end?

8. The intermediate school offers opportunities for the child to find himself. Possibly no greater service can be rendered to him by the public schools. Certain it is that too few do find themselves in their school days and too many of these do so too late to take advantage of all or much the schools have to offer them. The belief that young people are not prepared to decide upon a vocation until they have finished college is dangerous and wasteful. The young people of this country must know earlier what they are to do in life and prepare to do it. Whether they afterward do it or not

is of minor importance compared with what they become in preparing to do it.

A system of education that is worthy of the time, effort, and money spent on the American schools should be one of widest possible opportunities in which young people may discover their best qualities and powers. It should also induce them to develop and exercise these powers in the service of mankind.

Vocational advisers may be helpful and even necessary but vocational subjects properly presented offer a safer guide to young people in making their choice. These can be given with but limited success in the grade school; the intermediate schools furnish excellent opportunities for their introduction.

THE INTERMEDIATE VERSUS THE SIX-YEAR HIGH SCHOOL

The intermediate has distinct advantages over the six-year high school which proposes to admit pupils in the seventh year and carry them thru the twelfth. In some of the smaller districts where they are erecting expensive high-school buildings to accommodate a small number of high-school pupils it would seem best to organize the system on the six-year high-school plan. In the larger cities, however, where high schools are usually crowded and almost uniformly too large in numbers, the intermediate-school plan is better. The transition from grade to departmental work should be gradual. This is one of the important problems of the intermediate school, where it can be better worked out than in the large high school with other problems of its own. High schools have not solved the transition problem between the eighth and ninth years. To make the break as violent between the sixth and seventh as it now is in the ninth year would be adding to our difficulties.

Seventh- and eighth-grade pupils are too old to associate in school with first- and second-year children but too young and inexperienced to work on an equal footing with eleventh- and twelfth-year pupils.

In most states children are compelled by law to remain in school between the ages of six and fifteen inclusive. A school, therefore, that completes its work with the child at the age of fifteen is a logical unit in the public-school system. Its business will consist in the solution of problems raised by pupils of these grades and this it can do better than the large high school which is more interested in other problems.

The item of transportation to high-school centers and the unnecessary dangers to which young people would be subjected in traversing our large cities argues strongly for the organization of intermediate schools within walking distance of practically all its pupils.

To include the ninth year in the intermediate school insures an additional year's schooling to a large percentage of public-school children. Having finished eight years of work, they will remain the additional year to graduate with their classes and complete the courses they have undertaken. If they were admitted to the high school in the seventh grade the temptations to drop out of school earlier would be stronger.

The three divisions of the school system are physiologically, psychologically, sociologically, and logically correct. The present organization of eight years in the grades and four years in the high school violates the principles of all these sciences.

THE INTERMEDIATE AND EXTENDED HIGH SCHOOL

The intermediate school assumes its true significance only when considered in connection with the extended high school. With but six years given to the mastery of the arts and the remaining eight years to the development of the individual and his preparation either for junior college work or for a definite vocation in life, our system of education opens up tremendous opportunities and possibilities for the school children of the country and will make returns for the nation out of all proportion to the additional cost necessary to operate it.

TOPIC: THE DETERMINING OF SCHOOL EFFICIENCY

A. THE VALUE OF THE EDUCATIONAL COMMISSION IN DETERMINING THE EFFICIENCY OF A CITY SCHOOL SYSTEM

CALVIN N. KENDALL, COMMISSIONER OF EDUCATION FOR NEW JERSEY, TRENTON, N. J.

The attempt to determine school efficiency by means of commission investigation is the most recent method of answering two questions: What return is the community getting from its investment in the schools? How can the investment be made to yield greater returns?

The movement to test efficiency in this way has by no means become widespread. So far as I know, the schools of not to exceed half a dozen municipalities have been examined and reported upon. The investigations have been carried on within the past eighteen months.

The data are consequently both insufficient in amount and too recently gathered to afford sufficient information upon which to base definite conclusions as to the real or ultimate value of such investigations and reports. Nevertheless, a consideration of the value of commission reports is worth the attention of this Department, even tho the discussion must be largely academic or theoretical, rather than pointing to what has already been accomplished. A consideration is worth while because signs are not wanting that such investigations will gradually become more common. What are these signs?

First, public interest in education is growing, as evidenced by the increased amount of public discussion concerning it. A generation, itself educated in the schools, is bound to ask questions about the schools of the present day. It would indeed be a discouraging comment upon the schools of the past if it were not so.

Second, there is increased confidence in the possibilities of the schools, as Dr. Eliot has pointed out. "Democracy is looking more and more to the schools to make things go well in this country."

Third, public education is becoming slowly but surely a more serious business. Efficiency tests are likely to be demanded at a time when "efficiency" seems to be the popular catchword. This is an age, too, of increasing publicity in regard to all public affairs. The educational statistician is abroad. His figures throw light upon certain phases of efficiency, and are of use so far as they reveal measurable conditions. In this practical age there is sure to be a search for tangible results of educational processes. But is it too much to affirm that there must remain some vagueness and uncertainty in ascertaining the results of education? In the realm of the intellectual and spiritual, with which education has so much to do, there is a very large residuum, the value of which cannot be measured by figures and tables.

As a result of my observation of teachers in action in many schools, I am skeptical of finding, by any known test or commission report, a definite measure of the value of much of the teacher's real work. The factory is one human institution, the school is another. The value of the output of one may be determined in the office, but the whole measure of the other institution, the school, cannot be so measured.

With this qualification, the educational commission affords a means, available to every community of considerable size, of reaching conclusions regarding the efficiency of its schools; measured, first, by what figures and tables may show; second, by the extent the administrative methods, the organization, the course of study, the schoolhouses and their equipment, are in accord with what has come to be widely accepted as the standard for American schools, so far as there is a standard; third, by observation of the teaching, and, speaking somewhat vaguely but nevertheless confidently, the general spirit of the schools.

I am of the opinion that school superintendents should not look with too great suspicion upon this movement, or regard it as another means of making their work more hazardous than it is. Broadly viewed, the educational commission should not be regarded as a club to be wielded in the hands of the enemies which every capable superintendent sooner or later makes.

Investigation may be of constructive value in two ways. In the first place, it may reveal to the school board and to the public the strong points of the schools—features which are locally unknown or unappreciated. In the second place, it may point out the desirability of certain improvements or changes, which the superintendent has perhaps urged in vain upon callous boards or an indifferent public. For example of the first, in Baltimore the Commission last spring found much to commend in the well worked-out and extensive plan of grouping in special classes or schools particularly able pupils. For example of the second, the Baltimore Commission reinforced the recommendations of the superintendent, that the schools needed additional supervisory officers.

In East Orange the report pointed out to the community that the grammar-grade children are excellent spellers. It also pointed out that "there should be a more thoro systematization of the work of the Board of Education, the superintendent of schools, and the other officers of the system, such as shall specify the functions and responsibilities of each," a matter which the superintendent had before strongly advocated.

The report of the commission may be valuable, in the third place, by pointing out the need of more money for the schools. The Baltimore report showed that of the cities of its class in population, the expense for schools was less in Baltimore than in the other cities. The Montclair report stated that it is false economy to save money temporarily by doing without satisfactory playgrounds. "Ultimately," the report goes on to say, "the city will find it necessary to provide them at a greater cost; and meanwhile the children must go without the really indispensable education playgrounds afford." The Boise report showed that the term of service of teachers in that city was altogether too short, and this due to inadequate salaries.

I am of the opinion that the investigation and report should not overlook a consideration of the influence of any general political agencies that may be at work in the community to undermine, impair, or overthrow sound educational policies for the development of the schools. These agencies may be found among members of school boards, or among politicians outside, or even, unfortunately, among a minority of the teachers themselves. The existence of these agencies may be unsuspected by the community. If they exist, the commission, from its own independent position, might well give voice to its convictions on the subject.

The activities of a system of schools are now so varied, so complex, so extensive, that some of these, in the best schools, are imperfectly carried on. This same imperfection is true of railroads, manufacturing establishments, department stores, scientific farming, and every organized human endeavor. It is true of the best of these, and managers are on the lookout for improved methods.

So, likewise, it should be with the schools. In fact, an increasing number of superintendents are studying the problem of increased efficiency.

The commission, from its independent study of conditions with an unprejudiced point of view, may be able to enlarge the vision, clarify the views, and recast the opinions of superintendents in respect to some of the many-sided activities of his work.

In my judgment, the commission should not neglect to touch upon the most important factors which contribute both to school efficiency and to school inefficiency. The list of these factors is a long one—the dangerous conditions of buildings in respect to fire, pointed out in several reports of commissions already made; the inadequacy of playground space, also pointed out in more than one report.

Other matters to which attention has been called in reports are as follows: imperfect light; slovenly school buildings; absence of constructive, inspiring supervision; failure in the rules to give the superintendent adequate power in the appointment of teachers; low salaries in comparison with other cities; far too numerous changes in the teaching corps; the retardation of pupils; the overcrowding of rooms, usually in the primary rooms, where the children are docile enough to stand it; lack of professional attitude on the part of teachers; the lack of provision for backward or subnormal children by means of special classes; measures to promote health; provision for industrial training; the adaptation of the life of primary schools to child life; the quality of teaching, so far as there may have been opportunity to observe it; the spirit of the teachers as affected by the quality of the supervision; freedom in the interpretation of the course of study; the interference of board members in the work of teachers, in the promotion of teachers, in the general morale of the teaching corps; the amount of home study; the relations of parents to the schools; the equipment of schools, not overlooking the seating; the abuse of the examination system; the course of study.

It is conceivable that the extent of a comprehensive survey may reveal to the board, for the first time, the nature and extent of a modern school system, and may afford to the public a glimmer of the many-sidedness of the work of a superintendent.

The report should commend the achievements of the schools. The public needs education in this direction, as well as in the direction of still greater achievement in the future.

The following is taken from the Baltimore report:

> The net result of our inquiry into the system of education is an opinion favorable to that system. While we find much to criticize adversely, we have taken into account the historical development of the system and its very moderate cost at the present time. In view of these considerations, we are justified in rendering a report which in its main outlines is positively favorable. With reference to any school system the important thing is not so much the question, What is its present status? as that other question, Is it moving in the right direction? It is clear to us that, under the charter of 1898, in spite of certain particulars in which changes are still called for, the general movement in Baltimore has been unmistakably in the direction of improvement. We have, in fact, been repeatedly struck with admiration for progress which has been made in the face of more than ordinary difficulties.

While the report in certain particulars may reflect upon the judgment of the superintendent, or upon some policy of his, yet a strong man need not fear this. The day is past when any educational system is regarded as perfection, or any man or set of men as having said the last word in education.

Much depends upon the manner in which the commission is appointed, or rather at whose instance it is appointed. The superintendent may indeed take the initiative in securing the appointment of the commission. Obviously it is much the wiser course for him to take the initiative than to have it taken by hostile influences in the community. The former course was taken in one of the small cities of the country, where the superintendent felt that certain conditions might be made better, but he needed the support and testimony of outsiders. He had the confidence of the leading commercial organization of the city, as well as that of the Board of Education. The commercial organization was induced to finance the expense, and the board agreed to co-operate. With this unusual combination of superintendent, school board, and commercial club all working in harmony, the subsequent report was received with much interest and confidence. The community was unusually enterprising. The commercial club was far-sighted enough to realize the value of good schools in making the city more attractive as a place of residence. The result was that all the recommendations made in the report were adopted by the school board, and the superintendent, strong from the outset, became stronger still because he had initiated a plan to bring in outside views or counsel.

Much depends, too, upon the character of the man or men on the commission. Obviously the commission should not from the outset be antagonistic toward the superintendent. On the contrary, it should be sympathetic toward the complex work of the superintendent.

What have been the tangible results of commission reports cannot be affirmed, because, as stated earlier, there is too little evidence yet available. In Baltimore conditions have been such as to preclude a serious official consideration of the main features of the report. The neglect of the report thus far in that city should not be taken as evidence that reports elsewhere would be treated in the same way. In Boise, on the other hand, all the recommendations were acted upon favorably within a brief period after the report was submitted. Conditions in the two cities are very different. One of these is the fact that one city is large and the other small. A large city school system is likely to move more slowly than a small one, even if all other conditions are the same.

How to turn an expert interpretation over into an unquestioned acceptance by public opinion is not an easy matter. Most of us know that reforms in educational practice do not go on by leaps and bounds, but by slow degrees. The suggestion is offered that after a report is submitted, it would be advisable for the commission to meet, in a series of conferences, the school board, the administrative officers of the system, the principals, the commercial organization, newspaper editors, and other leaders who have the power to shape public opinion and to get action. People who are singularly averse to reading reports may be interested in a public discussion conducted by the makers of such reports. The report must be got by some means into the public consciousness after its submission. It should not be pigeon-holed.

Even tho there be no visible results of its activities, the work of the commission nevertheless may be positive and definite. It may be serviceable to other and even distant communities. It may confirm the educational convictions and revise the standards of the more thoughtful among the teaching body. Such a result alone is worth while. It is too much to expect that such reports will all at once recast public opinion or immediately revolutionize the action of school officials, but unless educational conditions in a city are unusual, the report of a disinterested, capable commission will be valuable in shaping educational policies.

B. THE RELATION OF AN URBAN COMMUNITY TO ITS PUBLIC-SCHOOL SYSTEM

MARTIN G. BRUMBAUGH, SUPERINTENDENT OF SCHOOLS, PHILADELPHIA, PA.

Public education is the state's effort to promote and to provide efficient citizenship. It best accomplishes this necessary result by training each separate individual in its citizenry to co-operate most freely and fully with all other individuals. The state, for the ends of democracy, commits to the school the solemn and sacred service of fitting the child to do his part for life in that great social and civic activity which we usually think of as government in its broad sense. The individual can play his part in this organized game of life only so far as he is given such knowledge of the game as to enable him to play it understandingly and cordially. If to this is added the fact that the individual is by birth a member of the committee on rules, intrusted with the power to amend the rules of the game from time to time, it is manifest that the fate of this thing we call government is conditioned upon a proper preparation of each member of it to do his part in such manner as to promote the welfare of the entire group.

The essence of school training is co-operative and not competitive. It consists in giving to each member of the social group the common elements of a universally necessary education. These tools of democracy are the stable elements that must always lie at the heart of a school curriculum. The possession of these is essential to the life of democracy. The imparting of these is the business of the school.

So long as the school is the only social agency broadly at work in a community and the life outlook of its pupils is only to a career of individual industry, one has a rural situation. Education here is a relatively simple process. But when the school is set in a great urban community in which all activities of the individual are trenched upon by a multiform and highly organized economic situation, education becomes a vastly more complex process.

The school has definite and important obligations to an urban community. These I do not propose to discuss. But what is the relation of a great populous community to this institution set to fit its individuals for wisest relations to society? The function of the school is limited in scope by legislative enactment. In this restricted scope it is further limited by the financial support the community provides. Within the bounds of statutory law and local taxation, the school, as an agency of the state, must carve its career and define its function.

These limitations should always be considered by citizens, who in their zeal to broaden, and, as they believe, enrich the work of the school, insist upon incorporating into the school's activities certain reforms that are either legally or financially impossible.

These limits upon the school tend to make it conservative. Private initiative frequently outruns public policy and the school is made to appear as hostile to the progressive spirit of many good citizens. This situation is always possible in a great city, with its many divergent educational ideals and with its non-homogeneous communities. It is, however, wiser and better to be held by some as conservative than to be held by any considerable number in the urban group as extravagant and visionary. The issues of public education are too momentous to allow of radical experimentation. What then is the outlook?

The school plant, its physical appointments, belongs to the people, and should be freely used by the people for all sorts of educational activities that are not yet demonstrably within the range of the school. We are passing rapidly from the old and narrow idea that the school building is merely a place to educate children of a certain age in a defined way, to an understanding of the fact that schoolhouses are the people's forum—to be used by them for every wholesome intellectual, social, recreational, and moral purpose that makes for the common good. We are coming rapidly to the opinion that the school building should be open day and night for every legitimate use that the community as a whole can vision.

This newer concept of the use of the school plant in an urban community opens the way for substantially unlimited experimentation. There are many unsettled problems in the educational policy of a social democracy. Wise and public-spirited citizens, quite apart from the accepted procedure of the schools, may find in this newer use of school property a legitimate sphere of exploitation. This enterprise may take the form of public discussion or the vastly more promising form of public demonstration of those things which once proven to be educationally good may find permanent place in the scope of the school's legal and financial possibilities. Private initiative is thus given a definite relation to constructive educational procedure. It is saved the unfortunate relation of destructive criticism—a relation that in general disturbs and does not promote the stable educational procedure of a great city.

In the immediate past or in the present private initiative has been most helpful in promoting in an intelligent way, and for the most part in public-school buildings, the movement to enlarge and to enrich the entire school activity of a city. And all this, be it remembered, may be done with the full sympathy and co-operation of those who by law are charged with the administration of the schools. It enables the citizen with a great thought to carry it to a successful demonstration and to see it finally made an integral part of the training given the children of the city. He has some incentive to devote time and money to his enterprise when the community regards with expectancy the issue of his enterprise. He has relieved the schools of an expensive experiment, promoted their effectiveness, and achieved a notable good.

On the intellectual side, private initiative can promote such important agencies as:

Home and school associations.
Free lectures.
Studies of racial groups.
High schools on a modern basis.
Schools for the mentally defective.
Schools for the mentally retarded.
Other special classes.
School gardens.
Vacation schools.
Trade schools and continuation schools.
Circulating libraries for pupils and parents.
Industrial education in the elementary grades.
Decoration of school buildings.

On the physical side it can promote such agencies as:

Medical inspection.
School nurses.
Special treatment of defective vision.
School visitors.
Zones of silence.
Orthopædic clinics.
Clinical care of children's teeth.
Mothers' alliance for the care of babies.
Treatment of the deaf and blind.
Outdoor schools for pupils suffering from incipient tuberculosis.

On the social side it can promote such agencies as:

Playgrounds.
Equipment of school yards.
Social centers.
Employment agencies for pupils leaving school.
Recreation centers.
Public baths.
Kindergartens.
Play carnivals.

On the moral side it can promote such agencies as:

Savings banks.
Parental schools.
Special classes for unusual girls.
Organized moral training.
Simple housekeeping.
Such other forms of volitional education as will result in securing to every child habits of right action, as surely as he forms habits of right thought.

The real friend of the state aims to confirm and extend these stable institutions of society, the church, the home, and the school. He is ready and alert to give time and money to the promotion of all legitimate progress in the social order. He is willing and anxious to try out in experimental form whatever bears the promise of help to childhood. He is always co-operative and constructive, and never cynical and destructive. He sends, half in hope, half in fear, the dove across the mist-hung waters, glad if on its return it bears the promise of better laws and loftier ideals for the training of citizens for the republic of men and for the Kingdom of God.

C. *HOW MAY A COMMUNITY LEARN ITS UNMET SCHOOL NEEDS?*

WILLIAM H. ALLEN, DIRECTOR OF BUREAU OF MUNICIPAL RESEARCH, AND NATIONAL TRAINING SCHOOL FOR PUBLIC SERVICE, NEW YORK, N.Y.

By six lines of attack must a community learn its unmet school needs:

By democratizing the purpose of the schools.

By demanding that the public be continuously informed regarding school work.

By making it easy for newspapers to report what the schools do and need.

By denying that the schools are better than the health department, police department, tax assessor, or the politics with which school children must learn to cope. Schools are weakened, not helped, by being separated from the main currents of community life and by being protected against problems which play upon and educate the child before going to school and after its few short years at school.

By encouraging school teachers, principals, superintendents, and commissioners to tell currently what they want, what they need, and what they dislike, and where they fail. This means adequate comparative statements, first by supervisory officers for schools within each community, and then by county and state superintendents, by the United States Commissioner of Education, and by national comparing agencies such as the Russell Sage Foundation. Having given up the fiction that there is something sacred about school curriculum, school policy, or school men, there will at once become available a vast amount of testimony, interest, and constructive suggestion on the part of those who best see the unmet school needs, namely, the men and women who are meeting the children and the problems of curriculum, management, and health. This will follow, not precede, the establishment of definite and continuous tests for the efficiency of school trustees and of the mayors who appoint them or the publics which elect them.

By making individuals so proud of their schools, and so interested in school problems that they will paraphrase Louis the Great and feel and say: "*L'Ecole c'est moi!*"

No community will be able to see clearly its educational needs not met which has not the habit of studying and challenging frankly the educational needs which it thinks it is meeting and the methods of meeting those needs. The first requirement is, therefore, a system of school records and reports which will begin at the first day of the school year and record important facts regarding pupil, teacher, principal, superintendent, and system. But because no community lives by or for itself alone, every community will be helped in studying its own needs if it may see the experience of other communities. To help itself, therefore, every city should adopt the uniform records and reports which are being recommended by the special committee of the National Education Association.

From its own acute needs, however, and from its own disputes a community may learn more than from comparative tables for the whole country. To local reports we have a right to look for a special listing of doubtful or disputed points and for weak links in the administrative chain. No community which has not such special lists easily available can currently ascertain and study its unmet school needs.

The adequate current test of efficiency of teacher and curriculum becomes an adequate warning and serves the purpose of the "Glencoe bumps" at every street crossing which one Illinois town finds more effective than policeman or fine in preventing fast driving by automobiles.

Of urgent importance in all communities is a more definite standard than we have yet developed for the responsibilities of the school trustee. The time will come when we may safely say to those looking for unmet school needs: *Ask the school trustee.*

Because familiarity breeds astigmatism, myopia, despair, or at least procrastination in dealing with unmet needs, it is necessary now and then to bring in some outside light. One method of tearing away cobwebs is to send trustees, superintendents, principals, or teachers to the schools of other communities. This method has not been as productive as it ought to have been, largely because such visitors have not been expected to report their findings frankly to their colleagues and to their communities; in New York City, for instance, reports which cost thousands and thousands of dollars and which, if used, might have saved millions of dollars, lie in dust heaps unfiled, unindexed, unhonored, unused.

Another method of getting outside light is to bring in outside investigators. No community needs outside light more than a community which has been studying itself frankly and progressively, which has nothing to conceal, and which is eager to find where it can improve its school system. Such a community would do well to apply the following tests to its plan for a school inquiry:

1. Place the inquiry in the hands of a small local committee, each member of which has the "fact sense" and each member of which will be able to keep in constant touch with the inquiry. Obviously the program of this committee should be impersonal, non-partisan, and non-factional.

2. Give the committee enough time and enough money to insure a fair test of the

recommendations and constructive steps that should grow out of the publication of its facts.

3. This local committee should not delegate to outside investigators its responsibility for making the inquiry currently efficient. Pledges should never be made "to publish reports as submitted" unless reports stand efficiency tests—as to content and form. Pledges should, of course, be made, if needed, that the investigators' report will not be distorted.

4. No investigators should be hired who do not know how to break educational problems up into their elements. It is far more important to have investigators willing and able to learn what school men believe and disbelieve, and who know how to get facts in support of beliefs and disbeliefs, than it is to have "experienced educators."

5. The inquiry's plan and method should be explained by the committee to the public over and over again. Any part of the investigation which the public cannot be made to understand is not worth undertaking. It is doubtful if any benefits from investigation are worth while which the public does not understand.

6. To help inform and interest the public and to keep the public's questions constantly before official and paid investigators, some volunteer citizen committee should be organized and equipped to use this opportunity.

7. The inquiry should start with problems uppermost in the public mind and should proceed from most obvious and most pressing to less pressing and less obvious questions. Inquiries are often fruitless because inquirers insist upon looking for *x* and *z* before they seek *a* and *b*.

8. One hundred per cent problems should take precedence over 1 per cent or 10 per cent problems.

9. Facts, not opinions, should be expected from the inquiry.

10. The inquiry should be conducted not only with dispatch but with obvious dispatch.

11. The inquiry should be obviously constructive from the first day, i.e., should be "vocational" not "academic." Each forward step taken by the schools brings new needs and new facts to light.

12. The inquiry should be democratic, i.e., not by the investigators for themselves or for the committee, but by everybody for everybody thru the investigators.

13. Reports on each subject should be threefold: (*a*) description, (*b*) criticism, (*c*) remedy or reason for maintaining present practice.

14. As rapidly as conclusive facts are obtained, and as rapidly as forward steps are possible, report should be made to the schools and to the public.

15. School officials should be publicly put on record as to facts, criticisms, and constructive suggestions as each subject or field is reported upon by the inquiry.

16. No more should be reported at one time than the public can understand, i.e., not only should interim reports and reports of progress be made rather than one final report, but these interim reports should be given to the public in "doses" which the newspapers will take and the public understand.

17. No conclusions should be stated and no constructive suggestions made which do not proceed from facts.

18. Conclusions should be so stated that constructive steps will be taken.

19. Lists of questions raised by the inquiry, for answering which facts are lacking and further inquiry needed, should accompany each report of facts obtained.

20. The necessary follow-up work by schools and community for utilizing the results of the inquiry should be outlined as the inquiry progresses and summarized as the inquiry ends, as, for example, how current and periodical records and reports need to be modified so as to reflect the extent to which follow-up action is taken by the schools.

21. Money values and money tests should be emphasized and not evaded because both the money cost and the money value of schools are certain to be given ever-increasing

weight in all American communities. It is affectation to decry the same efficiency tests for public education which are now demanded for other branches of public business and for all branches of private business. Any school expenditure which is too esoteric to be discussed in terms of what it costs and what it is worth does not deserve a place in the public-school curriculum.

The era of school inquiries has hardly begun. Within a generation, if not within ten years, every state in the Union and every considerable town will be asking itself the question: "What are our educational needs?" The Training School for Public Service, conducted by the New York Bureau of Municipal Research, has already begun the preparation of men for answering these questions for communities, beginning with the field study of Wisconsin's school system for the state board of public affairs.

The National Education Association can do much to expedite and facilitate both the current and the special tests which go by the name of "school inquiry." The opportunity of a generation now confronts it in the application of the United States Commissioner of Education for a *big enough program, big enough staff, and big enough appropriation.* To secure funds for this wider program of comparative study is to take tremendous strides in helping every community in the country answer for itself the question: "What are our unmet school needs?"

D. *QUANTITATIVE TESTS IN EDUCATION*

GEORGE H. CHATFIELD, SECRETARY OF PERMANENT CENSUS BOARD, NEW YORK, N.Y.

The efficiency of our school systems is questioned. Not within memory has the attention of school men focused so persistently in this direction. Investigations of the schools of great cities follow in rapid succession. Methods of organization, of administration, of teaching are subjected to searching analysis. Findings, critical and constructive, dissenting and approving, are presented. Yet the tide of discussion is swelled, not lessened.

Commerce, industry, politics, philanthropy, and other great fields of endeavor are similarly agitated. Before the impact of the oncoming generation, idols, long worshiped, long cherished, are falling. The old order yields slowly; it clings tenaciously to known realities; it rejects the claims of the new propaganda; it denies their universality. And so the tide of conflict moves back and forth in the great fields of human endeavor, disclosing in the lull of struggle the inevitable processes of change.

Elimination of waste is the fundamental doctrine of the innovators—of waste in material, in effort, in energy, in lives, in property, in justice. Nowhere may the advanced stages of the struggle be seen more concretely than in industry, for no field has a more constant and compelling motive—profit. Here are exhibited new processes, new labor-saving devices, new methods of planning, more detailed instructions, more exacting records.

Astonishing statistics show results doubled, tripled even many times. A decreased cost for the producer is claimed—an increased product for the worker. Not that these results remain unchallenged. Where incontestable, they are ascribed to unique and specially favoring circumstances. Aside from these instances, old methods are asserted to be displacing the new wherever the latter have long been tried.

Apart from the matters in dispute, there is in all well-conducted businesses strict accountability for raw material, labor, machine energy, overhead expense, completed product, and residue. Inspection, supervision, records, at all stages of the process; inventories, balance sheets, detailed periodic reports, mark the intimate connection between facts and income. The absolute dependence of effective administration upon complete and well-ordered information is clearly recognized.

For example, in the Middle West a great corporation manufactures stoves on a large scale. The shop history of each stove is kept in detail from raw material to shipment of finished product. The name of each workman responsibly concerned in the inspection of raw material, in the making of any part, in examination and shipment of the completed stove, is recorded. A complaint from a purchaser immediately locates the responsibility upon the workman at fault. The article upon which this care is lavished retails at $15 and upwards. The annual per-capita cost for elementary-school instruction in New York City, by comparison, is approximately $35.

A Pennsylvania steel company is largely engaged in the manufacture of steel tanks and similar articles. A necessary part of the process of construction is the detailed estimate of the sales agent, the orders and receipts for material in the shop, including such details as the number of rivets, the time spent by each workman and machine, a distribution of the overhead expense, and all these records in summarized form enable the sales agent in a distant city to make future profit a certainty, not an accident.

The conductor of a freight train is seemingly far removed from clerical pursuits, yet no care which he exercises over his trailing caravan is of more importance. He and every yardmaster concerned painstakingly report the number, point of origin, and destination of every car under their respective charge. The zealousness of operating employees is not the sole reliance in bringing a shipment to its destination. The central office expects to locate a car for any given date and to approximate closely the date for completion of the journey. Thus it meets the regular and emergency demands of traffic. How fortunate in comparison that school system which can approximate the date a pupil first came within its jurisdiction, and trace his progress from class to class, to say nothing of the date of arrival at his hoped-for destination.

Finally consider the New York Central Railroad and the public-school system of the city of New York—the former run at an operating cost of

$74,000,000; the latter, on the educational side, at an expense of nearly $26,000,000. For recording and compiling information, the former expends proportionately four times as much as the latter, and the same proportion holds when the material and educational phases of the school system are contrasted. As a matter of fact, when the efficiency of school systems is in question, the material of discussion is largely opinion. A technique of investigation and measurement is slowly arising, but its development is retarded by the absence of a generally accepted and recorded basis of fact. There are many figures, but for the most part they are unanalyzed and unrelated, and carry, even to the sophisticated, notions as exact and luminous as the volume of the wheat crop or the fluctuation in steel tonnage.

No doubt at this point there will be impatient protest that for that living complexity, the child, such comparison is meaningless. But is it too much to say that at least the administrator should be expected to know whether all these living units actually come within the scope of his influence, and to what extent? How else may he justify himself on the purely quantitative side when the business man complains of his product; when the social worker recalls the juvenile delinquent; when the criminologist points to the youth of the convict; when the child reaching maturity, unskilled and unwanted, points an accusing finger at the school he was so glad and so quick to leave?

These are not mere generalities. More than 9,000 children in the New York City public schools could not be located by the attendance officer last year; more than 6,000 were removed from the rolls for physical disability as the law requires; more than 12,000 were arraigned before the children's courts, and in 1910, more than 9,000 were convicted; 40,000 children received employment certificates; 60,000 children and more passed from official view and responsibility.

The state has virtually a monopoly in the field of elementary education. It excludes private enterprise because of its own immediate concern. The future citizen, the future producer and taxpayer, are so important to it that it undertakes the business of education for these ends. The statistics just quoted—and they are characteristic of the country at large—show that it is content to know the great majority have been reached, content to ignore those of whose existence and identity it is unaware. It further chooses to ignore the question whether its training has been efficient, whether it has produced the good citizen, the competent producer and rate-payer. It knows that the wheels of industry and trade and government continue to revolve, but it is unable to define or evaluate its part in the process.

Such is the common course of monopoly of all business from which the spur of competition has long been removed. While dividends are regularly declared, while needs do not outpace income, information is of little moment.

The passing of dividends, the need for greater income is the signal for its production. The public now questions the returns for the great sums it so lavishly expends on the schools—it is examining its waste products, the juvenile delinquent, the young criminal, the wayward girl, its matured youth, unskilled and ill adapted to employment. It is noting the success of the great Teutonic giant which long ago set its house in order.

How shall the state measure quantitatively its fundamental problem? How evaluate its efforts at solution? It must account for its raw material at every stage—its waste products, its marketable commodities. It must know the nature and extent of its ever-shifting market—the opportunities open to the labor and effort of youth and maturity so that training may be definitely correlated to such opportunities. This is the function of the continually recurrent census—in more concrete form to know who all the children are, where they are, and the conditions under which they live—what they have done in school and after leaving school, until it may be fairly inferred that the aims of the state have been realized. If the underlying theory is correct, a child can no more be lost to the appropriate training process in one part of the state than in another and, whether the community be large or small, such may be the result unless the responsibility for continuously recording each individual child be definitely located.

The work of the permanent census boards of the state of New York—there are three, one for each first-class city, New York, Buffalo, and Rochester—is founded upon this conception. These boards were created by act of the legislature in 1908, the new statute displacing one providing for a biennial census. The earlier law had met with indifference—the new statute faced vigorous opposition. General Bingham sought its repeal, the mayor failed to take any action. It was not until Commissioner Draper demanded a yea or nay answer and threatened to withhold the school moneys, that compliance was secured, but indifference still continues.

The Census Board is a separate corporate entity, consisting of the mayor, the police commissioner, the city superintendent of schools. It has a separate budget and is not subordinate to the board of education or any other city department. The law, in the following definite language, sets aside the administrative problem of the Board:

> . . . . said board shall always have on file a complete census of the names and residences of the children between such ages and of the persons in parental relation thereto. . . . . Such census shall include all persons between the ages of four and eighteen years, the day of the month and the year of the birth of each of such persons, their respective residences by street and number, the names of their parents or guardians, such information relating to illiteracy and to the enforcement of the child labor and the compulsory education law as the school authorities of the state and of such cities shall require and also such further information as such authorities shall require.

The information just described must be recorded for every child between four and eighteen years of age and provision made for keeping it practically current in point of time. Change is the most marked characteristic. While some children are passing beyond the reach of the law, others are coming within its scope, and the facts are changed for many of those already enrolled. In any absolute sense, there is no solution with the means available. In a practical way, it is possible to meet the requirements. The law requires the initial enumeration and the amendment of the census to be made by the police and contemplated the use of the regular police machinery. The opportunities thus afforded for policemen on street duty to be off post caused a separate detail of policemen to be made.

A census blank was first devised to be made out for each child. Compactness and accessibility of information were prerequisites, for they meant economy of time, money, and effort. A periodic census may neglect these factors; for one continuously recurrent, it would have been disastrous. Doubling the area or weight of the record card meant doubled filing equipment and floor space, doubled effort in filing and locating records.

A smaller record, clear and related in form, concentrates the attention of clerks, lessens effort, lessens error—augments results. A 4×6 inch card was used. For filling out many items, "Yes" or "No" was checked. All returns were made in ink by the police; the records were filed without recopying.

The initial canvass was made as follows. The public and parochial schools filled out census records for each child on register. These records, arranged alphabetically by street number on the block basis, were assigned with the corresponding territory to the police officers for verification. Specific directions were issued for the interpretation and filling-out of each item. Every family was to be visited, every building and vacant lot to be accounted for. A daily summary of the work of each enumerator was required and compared with the returns. Periodic statements were prepared grouping the results impersonally, and furnished to the individual enumerator, accompanied by his own record. Careless work was returned for revision. Buildings and vacant lots reported were compared with detailed street atlases, and discrepancies explained by outdoor inspection. Fourteen enumerators, indifferent or careless, were remanded to regular police duty. The remainder did excellent work. The initial canvass occupied nearly two years—from January, 1910, to December, 1911. As the sixteen months allowed by the statute for preliminary organization had been frittered away, part of the first year was devoted to planning and experiment. Fifty-six men and a lieutenant were at work from May, 1910, to July, 1911; 200 men would have been required to do the work in a few months. Further delay was caused by the requirement of Commissioner Draper that the census be kept amended in every district where the initial canvass had been completed.

Violations of the compulsory-education and child-labor laws, as reported from day to day, were transcribed and forwarded for the action of attendance officers. These numbered nearly 27,000. Children physically or mentally defective, and not already known to the authorities, were reported to the number of 3,600—of these, more than 1,100 were mentally defective. One thousand eight hundred neglected and destitute children received similar attention. Criticism has been made as to the validity of the violations of the compulsory-education and child-labor laws reported, but they were undoubtedly correct when discovered and referred. Much time elapsed before action was taken by attendance officers; in the meantime, the law had been complied with as directed by the police enumerators.

It has been said that a current census is impossible. The contrary has been demonstrated in the boroughs of Manhattan and the Bronx. Here the census was kept up to date for the better part of a year. A complete re-enumeration is not made. During the initial canvass, abstracts were prepared for each block, showing for each building, the name of each family and the number of children. (These are shortly to be superseded by new forms giving in addition the given name and date of birth of each child.) Individual census records for children at work or specially reported are also included. Of changes in register reported from the schools, some 600,000 are received annually—those involving discharge or change of residence are similarly classified by residence for the enumerators. To the foregoing, are added the names of immigrant children arriving in New York City for residence, by way of Ellis Island. Armed with these details, the enumerator verifies the facts already recorded and makes new entries only for changes. Visiting frequently the sections where moving is common, less frequently the sections where tenants are more permanent, a highly accurate amendment of the census is possible. Reporting of changes by house-owners and lessees has been advocated but is not yet approved by public sentiment.

The location by name from the files of so-called "lost" or individual children is not yet possible, an alphabetical file being necessary for this purpose. Its preparation is a year's work for ten clerks, including, as it will, more than a million and a quarter names. The appropriation for this work was refused this year.

An enumerator must cover a definite territory. From an alphabetical file, an assignment of work for such a definite territory is not feasible. Statistics also are generally wanted for small areas, usually by blocks. To meet these conditions, the original census records are filed by street numbers and blocks. Until lately, but few requests have been made for the location of lost children. The demand for statistics, the necessity for amendment work, have been constant and not to be ignored.

Machine tabulation has been largely employed, but is completely satisfactory only for congested areas. Small numbers are more readily cared for by hand. A punch card, 7⅜ inches by 3¼ inches is divided into vertical fields or columns—each column permitting a possibility of twelve printed numbers—0 to 12. Each column or field—two or more columns may be combined—corresponds in position to a field of census facts, the numbers in the column to variations in the facts, as shown by a code. The operator punches a card for a census record. The punch cards for a block are electrically sorted in number groups for each field and counted electrically. The punch cards are filed by blocks and amended, as their corresponding census records are amended. By amending the tabulating cards up to a given date, a correct tabulation as of that date can be had—the work of amending the census not being in the meantime disturbed.

The financial and educational authorities of the city of New York find no problem more difficult than the provision and location of adequate school accommodations. However vast the sums granted for this purpose, the increase and shifting of masses of the population have been greater. Census statistics now afford a reliable foundation of fact. The number of sittings, actual and available, for each school building is a matter of record. The number of school children, actual and potential, distributed by age and kind of school attended, is known for each block. Properly related on maps, it becomes a simple matter of arithmetic to fill up a school to its capacity, from the immediate neighborhood. As the process advances the areas lacking school accommodations are inevitably disclosed. With due allowance for natural and artificial barriers, the size and location of a building to serve the unprovided area may be readily determined. Automatically, the requests of the educational authorities are supported or opposed, the areas neglected or ignored are disclosed.

In 1911 the report of the Census Board to the financial authorities covered requests aggregating nearly $10,000,000, recommended an additional building in a congested section, and disapproved of seven others requested—a reduction of more than $2,000,000. As time passes, comparative figures by years for blocks and areas will show rates of growth or decline. This will be supplied for buildings as well as population. The general population figures for 1900, 1905, and 1910 have been similarly related.

Facts are also available for the study of the conditions affecting high-school attendance, and the consequent development of a system of high schools. These factors are type of school, age, and nationality of pupils, distance from school or transportation, length of residence, and occupation of parents. When connected with adult population figures, these statistics have a similar value for the location of evening schools, recreation centers, playgrounds, lecture centers, etc.

The consolidation of schools and classes will ultimately be based on census statistics, showing the number of children attending different schools by age, grade, and residence, thus accurately relating means to end. Similar information will be available and required for the annual school budgets.

Training for vocation and vocational guidance are topics concerning which much is said today—less is known. The schools are urged to take up this work extensively. The information already gathered by the Census Board shows that opportunity for minors in the skilled trades does not exist in large amount. If the extension of vocational work in the schools is not to be more than wasted, exact knowledge is wanted concerning conditions and opportunities of work for young people today. Such information requires contact with the individual worker—the worker on the census lists—as well as with industry itself.

The city of Munich this year placed 2,150 out of 2,200 elementary-school graduates in specific callings. How did it do this? Not by guesswork. Each such calling had been carefully studied as to opportunities and requirements, each boy carefully studied to an extent that Americans are likely to call ridiculous, and a careful adjustment made. In New York the Census Board has statistics of workers from fourteen to eighteen years of age. The detailed study of specific occupations is part of its declared future policy.

Earlier in this paper, the existence of census boards was justified because of the immediate concern of the state for the future citizen and rate-payer. Enough has been said to indicate the way in which the problem has been approached. The census board under this, or other more significant name, will undoubtedly become a bureau for children's welfare, in the sense of providing information. At present a struggle has begun for enabling legislation in a definite direction. This may best be described by the following quotation from a report to Commissioner Draper in answer to a query as to the value of the census bureau as a basis for the proper and complete enforcement of the child-labor and compulsory-education laws:

> At present the two statutes are enforced through four different agencies; the census board, the board of education, the board of health, and the state department of labor—dealing respectively with the registration of children, the issuance of working certificates, the enforcement of school attendance, and illegal employment. Each phase, save that of registration, is a minor function of a great department of the state or city government—a method of distribution of powers and duties that can be defended only on the ground of exceptional efficiency, since inherently it makes for friction, obstruction, and delay. This office, as a mere reporting bureau, is unable to demonstrate the validity of its cases and, indeed, must present them to agencies supposed to cover the field from a different point of view.
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> Sooner or later these functions must be centralized and because of the broad basis of fact upon which the census work is organized, the conclusion seems logical that the duties earlier described should be joined to its present duty of registration. The work in Philadelphia has but lately been reorganized on such lines, and has been most successfully carried on in this way in London for a number of years.

THE FUNCTION OF THE KINDERGARTEN IN THE PUBLIC-SCHOOL SYSTEM

LUCY WHEELOCK, WHEELOCK KINDERGARTEN TRAINING SCHOOL,
BOSTON, MASS.

The story of life begins in a garden. It was a pleasant garden, so full of delight that today its name Eden means paradise. But it was not a place of idle delight. There was much to do in that garden. The world was young and the occupants of the garden were new to it. They must take possession of it and learn how to use it. Their education began in observing all the plants and trees of the garden, all the birds of the air, and the beasts of the field, and in naming them. And there was education by work, for the garden must be tended and cared for.

So life began in happy work, and obedience to the Lord of the garden. But an overweening desire for knowledge destroyed Eden, and its dwellers were driven forth to toil where no pleasure is, and to discover the misery of broken law.

This story of Eden is the continual parable of human life. The world begins again for each new life and all things are to be seen and named and used. A natural education begins in the activity of the senses, in the acquisition of language, and in learning the need of obedience to law. More than half a century ago a man, Friedrich Froebel, with the wisdom of the philosopher and the soul of a child, had a vision of what education could do for human beings with such favorable natural beginnings. He gave form to his vision in a scheme of education to which in a moment of happy inspiration he gave the name "Child Garden," thus indicating its scope and purpose. It exalts development and training above knowledge. Its function in a school system is to make the right beginnings of the educational process. It is a part of a whole, necessary to the excellence and completeness of the whole. As a system it has its own distinctive characteristics, and special instrumentalities and methods, which must be preserved in order to demonstrate the principles on which it is founded, and to realize its aim.

All kindergartners would agree on three fundamental Froebellian principles. These are the importance of each stage of growth, the development of self-activity, and the belief that we are all members one of another. To exemplify these in practice thru carefully selected means and the organization of the play activities is the special function of the kindergarten.

A consideration of the first principle shows at once that the kindergarten is not static, but dynamic—that educational means and methods must conform to the stage of development reached and must be progressive. It demands that the selection of educational means must keep pace with the growing needs of children, that they be suited to varying local conditions, modified by temperament, racial traits, and the degree of culture of any given group.

A recognition of the importance of each stage of development constitutes also the strong claim of the kindergarten as part of public education. We will let Froebel himself speak:

> Vigorous and complete unfolding and improvement of each succeeding stage of life depends on the vigorous, complete, and original development of each preceding stage. The boy is not a boy, or the youth a youth, simply because he has attained the age of boy and youth, but by virtue of having lived thru, first, childhood, then boyhood, faithful to the claims of his soul and mind and body.

Neglect of any stage of a growing thing means defect. Neglect of an early stage means serious loss, because wrong tendencies and habits are established.

To the school society relegates the task of equipping its future members with capacity for service and ability and desire to work for the good of the whole. The state insists upon a certain period of school training, that it may preserve its own integrity. This period is abbreviated more and more by the pressure of industrialism. If it be true that in America nearly 50 per cent of school children leave school before the sixth grade, and that the average period of school attendance is only five years, then every year conserved for education at the beginning is of the utmost economic value. It would also seem economically desirable to give the best tuition and guidance at the beginning, when the kind of world each child is to see and to make is largely determined. From the relative cost of education in different sections one would judge that this fact has not been fully recognized. In the 1910 report of the superintendent of public instruction in California, made with no reference to an argument for the kindergarten, the following figures are given:

Cost per year for each pupil enrolled in public kindergartens	$ 22.80
Cost per year for each pupil enrolled in elementary schools	31.98
Cost per year for each pupil enrolled in high schools	74.85
Does not include buildings.	
Cost per year per prisoner in penitentiary	255.85
This cost in addition to earnings of prison.	

The recent report of the Boston School Committee gives the following figures:

Cost per pupil in elementary schools	$31.98
Cost per pupil in Latin and high schools	76.63
Cost per pupil in Boys' Latin Schools	94.31
Cost per pupil in Girls' Latin Schools	69.69

The cost for elementary schools includes salaries of the supervisors of kindergartens and of domestic science and salaries of twenty-two truant officers, aggregating over $30,000 yearly.

In favored Brookline, with small classes, the city expends $55.20 for each kindergarten pupil, and $91.02 for a high-school pupil.

From the West, Miss Vandewalker reports that in Milwaukee the cost per pupil in the grades is $29, in the high schools $58. In Chicago it is

$33 in the grades, $57 in the high schools, and $89 in the Technical High School. In Detroit the cost in the lower grades is $31, in the grammar grades $41, and in the high school, $67. These figures were taken a year or two ago, but the proportion probably remains about the same.

Has this economy in equipment and teaching force in the lower grades anything to do with the necessity of employing truant officers at considerable outlay of school funds? Would the boy crawl like a snail unwillingly to school or go under escort of a truant officer, if he found there a place which satisfied all his desires to know, and all his wish to express, and his will to do? The teacher who can thus minister to the needs of childhood is beyond all price; but she also demands a price.

A recent article in the *Journal of Education* shows the value of the kindergarten to the school system in minimizing the number of retarded children. About one-half of all retarded children are retarded in the first two years of school life.

> The retarded pupils cost the taxpayers upward of $25,000,000 a year. They cause four-fifths of the nervous strain of the teachers. They rob the rest of the pupils of much of the teachers' attention that belongs to them. To save the $25,000,000 waste, the teachers' nervous strain, the time and effort that belongs to all the children, would be a vast achievement. The kindergarten can do all of this and more if the primary grades will accept their share of responsibility for the adjustment. If the primary school accepts its responsibility, a kindergarten promoted class may keep itself very near a unit for the entire eight grades. The kindergarten may save the taxpayers many times the cost, may postpone the teachers' retirement several years, and impart to the work with the other children an inexpressible impulse.

In Boston the raising of the school age to five or five and a half years means a longer period in the kindergarten and has already shown a reduction in the number of retarded pupils.

So far the school system provides better for the small number who finish their education in the upper grades than for the many in the kindergarten and the lower grades, who never get to the top.

> There are about 5,000 kindergartens in the United States which enroll approximately 250,000 children. But this is an insignificant number, less than the number enrolled in little Belgium or in Austria-Hungary, and less than half the number enrolled in the infant schools of either England or France, altho the population of both of these countries combined does not equal that of the United States. [Nina Vandewalker in *The Kindergarten the Basis for Public Education.*]

The development of the fundamental before the accessory muscles gives a natural term to large, free-play movements, before the hand is ready to grasp the pen as a tool of language. The gradual awakening of the powers of careful observation and discrimination, dependent on developing brain centers, points to the wisdom of preparing for the recognition of the signs of language by preliminary exercises in form, color, size, and measurement. An alphabet of things should precede the alphabet of the primer. The progress thru the school grades and the development of later capacity will be the final test of the "wonder-working" Montessori system, which initiates children into the arts of writing and reading at the age of four.

Aristotle, Quintilian, and other wise men of the past argued that the best teacher should be given to the youngest children, on the ground that the formation of right tendencies, aptitudes, and character was of the highest importance to the state. For the moderns, Professor John Dewey has said:

> The American people believe in education above all else, and when the educators have come to some agreement as to what education is, the community will not be slow in placing at their disposal the equipment and resources necessary to make their ideal a reality.

When kindergartners, superintendents, and other educators decide that the kindergarten furnishes the best basis for the public-school system, and agree as to the type of kindergarten desired, it will be established as firmly as the primary school and not subject to the vicissitudes of opinion of short-sighted taxpayers.

The advocates of the theory that the young child is a "little animal," and should be left free to carry out his animal impulses in some convenient back yard, forget the scarcity of back yards in a congested city district. They also ignore the world-wide proof of the claim that those who guide the first seven years of a child's life may make of him what they will. They fail to see that a civilization which desires to "let the ape and tiger die" must view the child as father to the man. The state may later have to pay $255 a year to protect itself from the neglected child, who may be initiated in his formative period into the standards and ideals of the social group at a tenth of that cost. As a thinking animal a child's mind demands some attention, as well as his body.

If it be conceded that the beginnings of education are important, what is the best beginning? Has the kindergarten demonstrated its reason for being? Has it made good? Judgment of any system based on random observation of individuals is unreliable, whether made by a university professor or in the columns of a popular journal. No careful and extended examination has yet been made of a group of kindergarten children kept as a unit thru the grades, and compared with other groups not starting in the kindergarten. Until such findings have been made public there are no data for accurately determining the more rapid transit of kindergarten children thru the grades.

> With prejudice it is useless to reason, as it did not come into the world through reason.

We must judge the kindergarten as we do any other part of the school system, by examining its aims and methods to see if they are true to the general purpose of school-training. We must then insist that its practice conform to its declared educational aims. No one can claim that the kindergarten has fully realized its aims any more than the high school has reached its ideal of scholarship, or our democratic country the ideal of democracy.

"A man's reach exceeds his grasp," and the kindergarten has still its heaven to reach. Its aim is growth, not *knowledge* or *intellectual advancement*—growth in wisdom and in stature and in favor with God and man. Its method is determined by the two great principles already stated: self-activity and interrelationship. As to the first, there seems to be rather universal testimony from primary teachers as to its effectiveness. The objection to kindergarten children most often heard from first-grade teachers is that they are "too lively." In a process designed to promote efficiency, initiative, and power, that is not a serious objection. The opposite of lively is deadly, and no grade would accept that term as descriptive of its procedure. Where the best co-ordination has been made between the kindergarten and the primary grades, the best results of kindergarten training are observable.

For the thirty years of its existence in this country, the kindergarten has held to special educational materials designed to aid and abet the child's self-activity. These materials are used to develop the powers of observation, comparison, investigation, experiment, and invention. They are organized into a series, that there may be progressive guidance and consecutive exercises. They offer means of sense training, but this is not their final purpose. Neither is motor training or manual training the chief end. Their goal is complete activity, leading to efficiency, which is the power to do, to produce.

Says Froebel:

> We must begin in infancy to discipline and train the hands and fingers. We must teach the child to use aright the different members of his body, so that when he becomes capable of productive activity the objects he produces may have real worth.

The "complete activity" demanded by Froebel, "in which are blended body and soul, mind and heart," calls for application, interested attention, and the artist's joy in making. It would dispense with truant officers. Lack of fiber and disinclination for real work discovered among the students in some universities are not to be traced to the oft-times sporadic and brief period of kindergarten training, but to social conditions. Master Reginald, in his luxurious home, surrounded by dumb waiters and speaking waiters, with buttons to press for the supply of all his whims, whose very toys are wound up to spare him the trouble of starting them, will no doubt carry marks of enervation with him thru all the school period, which the best kindergarten cannot eradicate in three or six months, or even a year.

This aim of productive activity distinguishes the kindergarten at once from the Italian system now so much before the public. In a recent article in the *New York Times* illustrating this system we read:

> Although the games are played and the lessons taught with mechanical toys and blocks, bits of wood, and pieces of cardboard, and silk and leather cords, the children do

not follow out any ideas of manual training in "making things." They do not make anything. They simply play with the apparatus the games that teach the day's lessons.

The theory of education thru play is common to the two systems, but the use of play-materials to provide a quick and easy approach to the arts of writing, reading, and arithmetic is not a part of the kindergarten scheme. Its materials are developing, not "didactic." It makes sense training and motor training a part of its educational plan, but not the whole. Nor does it limit its production to handwork. To build a city is well, to make a City Beautiful is better.

The song of the singer, the rhyme of the poet, the tower which is "frozen music," the vision of the artist, who sees an angel in the marble, the words of the preacher—these are the city's best wealth. The possession of these things makes any city a Rome to which all the world builds roads. Because we believe this, the kindergarten introduces those elements of culture which develop power of appreciation and love of the beautiful. It gives various means of expression, that the child may learn to speak a varied language and so come to choose his own. The walk to read the great story-book of Nature, the excursion to see how the world works, gardening to teach the lessons of growth and nurture—these are the means the kindergarten uses to open the eyes of children to the world in which they live.

The song, the rhyme, the dramatic play, and the story appeal to feeling and influence the imagination—that faculty which rules the world. The scientific pedagogy of Dr. Montessori places emphasis on practical life, and disclaims any appeal to the imagination. But it is most unpractical to ignore the faculty which has built cities and adorned them, bound continents together, and given to man the bread of life. It is necessary to acquire language and a good vocabulary, to secure good pronunciation and enunciation, but there is a speech uttered from the heart out of which are the issues of life. The child is a poet, and song and rhyme are a part of his natural utterance.

Finally we must consider the function of the kindergarten as a place for social training. It would be difficult in a public-school system to promote any theory of education which did not recognize the value of group and co-operative work. The ideal citizen is the neighbor. Who is my neighbor? is a question the school is to answer, if it meets the demands of the society which supports it. School is not preparation for society. It is society. Here as in the greater world the law of membership holds: "We are all members one of another." The preliminary to working together is playing together, and at all stages we must live together.

The breaker of the law, from the man who overspeeds his automobile to the man who defrauds investors and stockholders, from the drunkard to the professional thief, is a man who has no sense of responsibility to his fellow-men. He doesn't feel his membership in society. A child who has been to kindergarten has learned to play fair; to think of himself as only one among many; to acknowledge the rights of others; to work together and not against. These things become part of him, are instilled into his blood, woven into his nerves. His prejudices and impulses are all toward good citizenship. [Quoted from Professor Holmes, *Does Kindergarten Pay?*]

Free play gives scope for the development of individuality. It originates. It discovers. It explores. It gives freedom and power.

Organized and guided play gives collective power. It enforces the virtues of the group—loyalty, a sense of law and order, obedience and self-subordination, and co-operation. It is a drama in which each must act well his part. Organization and direction of the play impulses, control, and obedience to the law of the whole are absolutely essential in any group of children where educational and social motives are considered. Our American republic is founded on the belief that "United we stand, divided we fall." Men are willing to bleed and die for this belief. To fail to demonstrate it in school training would be a fatal defect.

Because of its adherence to basic principles of education and life the kindergarten claims its place in a public-school system. By its industrial training it makes the beginnings for practical life, by its cultural training for a good life, and by its character training for a righteous life. In the past its task has been to leaven the school with its spirit, to demonstrate the educational value of play, resulting in the municipal playground, to show the importance of the story and dramatic game in education, and the significance of group work in relation to community life. Its task today is to improve itself by better practice of its own ideals, and to prove its claim to be the basis of the public-school education.

Its mission is to keep and tend a Child Garden wherein grow the seeds of the tree of life, whose fruits shall bless the school, whose leaves are for the healing of the nations.

TOPIC: PROBLEMS RELATING TO CHILD WELFARE

A. THE DUTY OF SUPERINTENDENTS IN THE ENFORCEMENT OF CHILD-LABOR LAWS

OWEN R. LOVEJOY, GENERAL SECRETARY—NATIONAL CHILD-LABOR COMMITTEE, NEW YORK, N.Y.

Our critics are urging that the National Child-Labor Committee add what they call "constructive" features to our campaign. Many say in effect:

> What good do you accomplish if you only shut the child out of the factory, mine, sweatshop, and street trade and leave him in idleness? Is not your work all negative? Do you not overlook the entire positive side of the problem? Is it not more important that the child should get a good education than merely that he should be taken out of the mill?

If this criticism were fair it would be a severe indictment of a philanthropic enterprise that has made powerful appeal to the public. There can be no justification of a policy which effects a half-cure and leaves the victim to limp out of the hospital to fight a battle against misfortune. The record of better child-labor laws secured in thirty states last year and in many states in our preceding six years of work means little if it stops there. But we refuse to plead guilty to the indictment. The effort to take little children out of industry and to prevent older ones from excessive or dangerous exposure is not an isolated enterprise, but it is a specialized enterprise. We recognize the existence of other agencies better equipped, more highly endowed to safeguard the interests that may be left exposed by our work. This is an age of specialization and our specialty is the release of little children from unfavorable industrial conditions. If we attempted more we should doubtless fail in even this.

While we acknowledge intense interests in the educational problems of our day and always co-operate in efforts to secure better educational laws, and while we realize that certain defects in school methods and equipment seriously confuse the whole problem of child-labor reform, we must at the same time decline any responsibility beyond that of other intelligent citizens. That side of the problem belongs to education. If children are thrown into vicious idleness as the result of laws which end their servitude in workshops and mines, the responsibility is not ours—it lies at the door of the schoolhouse. The American public-school system is said to cost our people not less than $400,000,000 per year, while various child-labor committees expend, I suppose, less than $100,000 per year. But there are people influential enough to defeat our child-labor bills before state legislatures because we will not guarantee to put and keep every child in school whose labor is interrupted by the proposed law.

Our work is of mutual interest and our efforts must interrelate, and recognizing the service school superintendents can render in the enforcement of child-labor laws I venture a few specific suggestions.

1. *Public school not a misfit.*—I need not dwell on the importance of emphasizing the dignity of the American public school as it is. Not even the church is subjecting itself to so merciless a grilling. Its most emphatic critics are schoolmen. And while we should like to go on record as indorsing all efforts to strip the school of outworn or meaningless incumbrances, there is something to be said for the school system on its present basis and we are in danger of driving children away by our frank confession that it is so bound by tradition and custom and a top-heavy curriculum that it is foreign to our present needs. Even as it is, let us make it clear to the public that the school is neither a misfit nor a failure. I mention this because of my second suggestion.

2. *Push compulsory attendance.*—The school superintendent can help enforce child-labor laws by pushing compulsory education laws into every section of the country. This is taken for granted in most parts of the country, but there are still sections in which, because of ignorance, pre-

judice, or tradition, the people are unwilling to accept this only foundation on which a public-school system can rest. It is not difficult to announce our belief in compulsory education at a convention like this, but what I am urging is that the man, whose duty calls him to the South and to places not south where people are hostile to compulsory education, shall have the courage of his conviction and insist that the children of those sections are entitled to the same educational benefits that accrue almost automatically to children of New York, Massachusetts, or Ohio. A powerful association like this can and should back to the limit one in such a position.

A glance at the census report of illiteracy in the various states outclasses all argument that can be advanced for compulsory school attendance, but from the standpoint of the working child the service of such laws is demonstrated by the fact that most children begin work within a few weeks of the birthday set by law as the minimum age. If the law releases the child from school and to work at fourteen he goes to work at fourteen, if at twelve he goes to work at twelve, while in the few states in which employment of children under sixteen is being made inconvenient they are tending to stay in school to sixteen.

3. *The public school is public.*—I further suggest that it is the school superintendent's duty to get all the children in school. For this he must have a correct school census which can be best checked up for accuracy by frequent reports from teachers. These can keep him in touch with the delinquent members of their classes, and with the family life of the community. They can get from young scholars valuable information about older brothers and sisters—their ages and occupations. Obviously a school census must also cover every parochial and private school, and no argument has to my knowledge ever been advanced against placing in the hands of public-school superintendents such a complete compendium of information about all the children in the community that he will be in possession of a full census.

The school superintendent is not clothed with discretionary power. When 10, 15, or 25 per cent of the children of a city are not in school, when their existence even is unknown, and when they are left to their own desires as to their future, someone has been false to a public trust. The public school is *public:* the taxpayer contributes to its support as a matter of business. We believe popular education contributes to a man's life; his family is more secure; his property enhanced; the market for his products stimulated according as the people of the country are intelligent. Therefore the citizen has a stake in the education of every child—not of almost every child, but of *every child*—and he has a right to demand that his contribution to the public fund in the form of taxes is equitably distributed.

I need not pause to discuss the practice of truant officers. The employment of one man to chase truants scattered over a hundred miles of streets, or the employment of a truant officer whose only recommendation is that fifty years ago he bravely carried a musket, or one whose only service to his city has been as the tool of some political party: these and other examples have made the truant officer in many localities a sorry joke. But without discussing this and turning to more satisfactory examples, we are aware that the typical truant officer considers his duty done if he rounds up the children who have fallen out of school for a few days and gets a fair percentage of them back. The exceptionally good truant officer feels his duty done if he gets every enrolled child in school. But where is the truant officer who regards himself responsible to the state to see that no child in the community is missed; to look up the family that moved to town last week; to report to their destination those children who move away? The duty is not easy to perform and we are too prone to overlook the demand child labor makes, not only on those children who are under age, but on all those with insufficient schooling. Whatever criticisms have been made of the truant officer rest in their final analysis upon the superintendent. His regulation of this department of the work may be difficult and may involve him in embarrassing complications, but there can be no question that the matter is vital and should be made with him a determining issue, if necessary.

4. *The school a social agency.*—The school superintendent will help enforce child-labor laws by recognizing that the school is the servant of all the children all the time. The interest of many teachers appears to be confined to children actually in school, or if to all the children who ought to be in school, is frequently confined to those only during school hours. In other words, it is a professional interest. This is said not in criticism, but in explanation, and the superintendent is in the best possible position to combat this professionalism among the teachers. The man fulfills his professional duty when he sees that children are properly cared for between the hours of nine and four, but the problems of education are so intertwined with the family problems of food and clothing, of employment, of recreation and rest, of ventilation and sunlight, that we cannot separate them. Many of us see in the public school the promise of a social supervision of the home care of children which shall eventually mean for every child an opportunity to develop. The school superintendent and his staff can best of all public officials recognize the existence, problems, temptations, and possibilities of children of school age before nine o'clock in the morning and after four o'clock in the evening. Discussions of delinquent and backward children are superfluous unless accompanied by facts gathered by an investigation as in every science. These facts can best be secured by school workers studying the living problems of their own communities.

5. *Why children are let out of school.*—Superintendents can directly aid in the enforcement of child-labor laws by arousing in their principals and teachers a conviction that it is unprofessional to misrepresent the age

and ability of children in order to get them out of school. In many cities it is the official duty of the school principal to furnish the information on which children are released from school and inducted into industry. Even where laws are specific they are sometimes disregarded. Affidavits are issued by subordinate clerks entirely ignorant of the law. Sometimes with a dispatch which can only be explained on the ground that the principal believes that the child will be better off out of school than in, these helpless children with no guide at home or elsewhere are thrust by thousands out of the schoolhouse and into our child-employing industries. Whatever our legal standard may be, we should insist on its observance and should compel definite steps to guarantee that no improper child shall be released from school, and at the same time every facility shall be given to the proper child to make the transfer he desires. To perform this service the superintendent must see to it that every teacher on his staff knows the child-labor laws of the state in which the city is located. This can be done by means of teachers' meetings, by placing copies of the laws in the hands of each teacher, and by putting the school in direct touch with the Department of Factory Inspection, the board of health, the juvenile court, and child-labor committees.

The superintendent should resist the desire of teachers to rid their classes of backward, unruly, or disagreeable children. We recognize that there are children who fit all these descriptions and that one of the sore afflictions of the school teacher is the endurance of such. Nevertheless these are a part of our citizenship; these are the very children on whom special attention should be bestowed rather than allowing them to drift out of school to lose henceforth any inspiration or guidance this institution can afford. When the child begins to lose interest in school, partly because of his own changing mental and physical condition which ordinarily occurs at about the fifth or sixth grade; partly because his parents are nagging him to earn his own living; partly because of the example of other misdirected children, he becomes an offense to the ambitious teacher who is eager that the whole class shall make a fair showing and that her faithful seed-sowing shall bring forth abundant fruit. At this point the effort to arouse a public sentiment in favor of child-labor laws is imperative. The school superintendent is the best possible person to do this, and many are doing it by encouraging teachers to a personal acquaintance with pupils and their home environment; by developing parents' associations; and by attempting to secure an exchange of experiences between teachers and parents' associations thru such agencies as the Public Education Association, giving special attention to exceptional children. If there were no solution offered by educational institutions themselves, I should hesitate to appeal to this point for exceptional children, but special classes for children defective in sight, hearing, or mental equipment have been so well established in a number of states that the idea of special training is no longer an experiment. The superintendent must be the schoolmaster of the board of education and the whole community regarding that percentage of his school children who slip thru the fingers of the authorities and become lost for lack of a substantial increase in school equipment in order to meet their special needs.

6. *Practical education.*—The superintendent can help enforce child-labor laws by giving the child who wants employment something to do. We must articulate the school with life instead of making it fit only the few who want to go to college. The demand today is widespread that we develop in our highly organized city-school systems a principle which was fully developed, altho in very crude form, in the old log schoolhouse familiar to some of us thirty years ago. It was possible there to combine industrial training—training which existed not for its own sake but for the sake of getting things done on the farm—with what little scholastic training the school had to offer. It was unclassified and bungling, but it taught hundreds of boys and girls the dignity, honor, and necessity of hard work and it made them appreciate during the school hours that they were not and could not be isolated from the actual problems of life. We shall hold the children in school; we shall win the support and loyalty of parents; and we shall eventually win the wholesome respect and right co-operation of those elements in the community that want to use these children, according as we emphasize the practical phases of education and link every course to living problems. It is for the educational effect on the children quite as much as for the purpose of securing obedience to child-labor laws that we urge this educational revolution. At the present time the three defenders of child labor are the employer, the parent, and the child. Progress against such a combination is slow and discouraging. A school curriculum fitted to the needs of our industrial civilization will rapidly win the allegiance of at least two of these allies, and with the parents eager to keep their children in school to the very last moment and with the children quite as eager to remain, the advocates of child-labor reform could afford to ignore the desires of that small percentage of employers who fatten on the product of the children's toil.

Much has been said recently in criticism of the eight-year course and the six-year law. It has been pointed out that the child who obeys the compulsory school law in many states leaves school before completing the primary course and it has been proposed to redivide our course of study taking two years from the elementary course and adding two years to the high school. It is, of course, unfortunate that the line of cleavage in school comes at the line of cleavage in the pupil. It is doubtful, however, whether the change suggested would accomplish the purpose desired, or whether on the other hand it might result only in the child breaking away, in many instances, two years earlier than now, having completed his primary-school course. Shall we not aid more in holding children in school if we develop some plan of filling the last two years of the elementary-school course with practical applications of the instruction which has been mostly theory in the first six years? We might thus try to get the child started in his new line of educational development; might arouse his interest in the laboratory methods involved, and, having given him two years of this before he finishes the elementary grades, awaken in him an intensity of interest in the four years of opportunity to follow. We shall thus help to bridge the chasm into which so many children now fall.

7. *The teacher must know industry.*—It will be impossible, however, to develop wise industrial training in our public schools unless superintendents and teachers become familiar with local industries. The development of vocational guidance is one of the most interesting adventures of the new education: it is worthy the highest commendation and encouragement. But I believe I voice the opinion of the leaders of this movement in Boston, New York, Cincinnati, and other cities when I say that there is in this and in the attempt to develop industrial education a point of caution we must not overlook. Many assume that if the children of our schools can have this new education instead of the old; if we can train them in school to make things of wood and iron and brass and cloth and dough, instead of as in the old days teaching them only Latin, Greek, and calculus, we shall be able at once to turn out into American industry an army of skilled and highly intelligent operatives who will lift our industries from their present unsatisfactory plane and will give employers of labor good and faithful servants.

We have watched with intense interest the development of half-time schooling for high-school and college students, combining education thru books with technical training; but we need to recognize that when we treat of the elementary-school child, there is another factor. There are industrial opportunities offered for the sixteen- or eighteen-year-old boy in many of our communities. He should be encouraged to seize opportunities and advance upon them. The same is not true of the twelve- or fourteen-year-old child, and when it is assumed that if a thousand children of this age are properly trained in school they can at once find the thousand jobs awaiting them in their city, the fact is overlooked that an examination of those jobs will reveal that at least seven hundred of them are unfit for a child under any conditions. This is true anywhere outside of agriculture. Economic pressure because of family poverty, and the pressure of industries which want to employ children are, in my judgment, the two chief factors in drawing children away from school today. If the teacher knew the nature of the job that awaits the child on leaving school, he could often dissuade it from entering that industry. Complain of the poor training our children get in school if you will, but American industry needs training more than do American children. The job that awaits the child is farther from the ideal than is the child. If our efforts to train our children industrially and to direct their minds toward vocation simply serve to make a larger number of them appear to fill the jobs that yawn for them at twelve or fourteen years of age, we shall have committed a sin against our civilization, and against the laws of human economics for which it will be hard to atone. But if I rightly understand the motives of those vocational guidance leaders who are fashioning new educational movements today, I agree with them that our chief interest in vocational guidance and industrial training is because of our belief that this work will help to revolutionize the school course. By bringing industrial considerations into our school course; by making children intelligent as to the history, significance, and opportunity of various occupations; by teaching the dignity of honest labor and the economic sin of making bad goods out of good material and the twin economic sin of paying wages that will not sustain life in reward for labor, we shall enrich and enlarge the school curriculum, making it so attractive that children will voluntarily remain in school one or two years longer than at present, and we shall save just that much of childhood to a richer, fuller maturity.

The sum of all this is that our work is one. While school authorities and child-labor committees may seem to be working in different fields and asking aid and favors of each other, our efforts interact in the same field. On the one hand, our efforts to secure child-labor laws and their enforcement, which sometimes appear arbitrary, are in fact only a part of the effort to lift from children the pressure which now crushes them out of school. And when we ask school superintendents to aid in enforcement of child-labor laws we are only seeking to offer them a tool with which to do their work more conveniently and to make the school serve more of the children.

B. HOW FAR SHALL THE PUBLIC-SCHOOL SYSTEM CARE FOR THE FEEBLE-MINDED?

JAMES H. VAN SICKLE, SUPERINTENDENT OF SCHOOLS, SPRINGFIELD, MASS.

The opinion is gaining ground that the care of the positively feeble-minded, like that of the insane, is a state function and not one for local communities. Few states have yet made adequate provision for the care of the feeble-minded, consequently for the present most cities and towns must do what they can independently till the state is ready to carry the full burden. The public is slow to realize the extent and gravity of the problem. One of the most competent authorities places the number of feeble-minded in any community at three to every one thousand of the general population. These are individuals who cannot sustain themselves in competitive industry. They remain children all their lives—children in intellect and will, tho adults in stature and in instincts.

Boys of this class, if left to themselves, are likely to drift into criminality.

Being too inefficient to secure steady employment, a life of criminality proves the path of least resistance for them and they soon come upon the state for support in our penal institutions. We know that large numbers of the inmates of our jails and prisons are mentally defective. At the expiration of their terms they are again thrown out upon the community no better able than before to sustain themselves honestly, and with even less will to do so. Out of prison as well as in prison they are a public charge.

The feeble-minded girl, if unprotected, is a still greater menace to the community. While there are feeble-minded children born into good families, such cases are sporadic. They amount to less than 20 per cent of the whole number. Eighty per cent of the feeble-minded are so by inheritance. To prevent the marriage of feeble-minded girls, and to shield them from temptations to which they are notoriously easy prey, is obviously the duty of society as a plain matter of self-defense.

What can the schools do? The public school is one of our social institutions and as such it may justly be expected in work with the feeble-minded to do whatever its publicly provided facilities permit it to do without neglecting its other functions. Some of the things it can do in this direction are as necessary for the protection of the normal children as they are advantageous to the feeeble-minded themselves. Each type needs instructions different from the other. The school can gather the feeble-minded into groups for special treatment and care, and it must do so much in the interest of normal children whose progress the subnormal impede if retained in regular classes. Furthermore, since the obscene and indecent acts which teachers sometimes have to correct are almost invariably committed by mentally defective children; on this account also the school organization should see to it that normal boys and girls are protected as far as may be from association with those whose sense of decency is lacking.

While feeble-minded boys are within the usual compulsory-attendance age, they are not a menace to school or society if taught in separate classes. It is when they are fourteen or sixteen years of age or over that they become a menace. The feeble-minded girl may become a menace several years earlier. The public school cannot, therefore, with safety retain feeble-minded children very long without a radical addition to present means for their care in the form of residential homes or colonies with farm, garden, shop, and productive industry such as are now provided only by the state. There must be separate homes for boys and girls to which they would be legally committed for life. This would not, of course, be necessary where the feeble-minded boy or girl has a good home and reliable parental protection. It would, however, be necessary in a very large majority of the cases.

It has been suggested, if parents are unwilling to have their children transferred to such a colony after they have exhausted the resources of the special public-school classes and have left school, that the feeble-minded may be guarded by teachers or probation officers who keep watch of them at their homes, and, upon any indication that they are going wrong or becoming in any way a menace to society, take immediate steps to have the state interfere and take such children to the colony home. Should society adopt this plan of self-protection, the school might properly be called upon to aid, since the teachers of the special classes are the only ones who know intimately the characteristics of the children in question. At any rate, it is manifestly important to have all subnormal children, except idiots, attend school during their earlier years, if only for the purpose of being studied. Some thus studied prove to be only backward or slow in developing and may safely be returned to the regular classes after time and special help have co-operated toward improvement. Specialists expert in this work find it impossible to determine, except after long observation extending in many instances over several years, whether a child is feeble-minded or merely backward, hence the special class in the public school serves its most useful purpose as a clinic in which suspected cases are slowly and carefully diagnosed. The mental condition of a child should, however, be determined as early as possible, certainly within the first two years of his attendance at school, lest habits of inattention too bad to be corrected be formed, and lest he become chronic in never accomplishing anything. These children are in special need of the inspiration of success. This they get in the special class where the tasks set are within the grasp of their feeble powers.

The teacher of the special class should be equipped, not only with technical knowledge of mental defects, but with ability and willingness to enter into sympathetic and friendly relations with parents of feeble-minded children, gradually and gently acquainting them with the child's real condition and with the advantages which the state colony offers, and finally securing their consent to a transfer to the institutions. The most delicate and individual work is required here, and the teacher who undertakes this service must be an exceptional person. One such in any single city, except perhaps in a dozen of the largest, would probably be sufficient, since other teachers with less scientific preparation could serve in auxiliary centers under the guidance of the single expert. Teachers of regular classes should call the attention of the specialist to suspected cases. These the specialist should observe in their rooms and advise for or against a transfer to the special class.

The school physicians and other physicians of the community, and social agencies of various sorts, should be drawn into co-operation so that each child may be put into as good physical condition as possible—his teeth mended, his defective eyesight aided by glasses if necessary, his body nourished by food and protected by clothing, either at public expense or by philanthropic endeavor. Hygiene, exercise, and manual industry should be the prominent features of the schooling of these children. The ordinary curriculum should be in evidence only incidentally. The public school will render its greatest service in fitting these positively feeble-minded children, as far as may be, for self-support under close supervision in some of the simplest industries that can be carried on in colony homes, and in sifting the human material that it handles so that the various elements will reach their proper goal, this goal being life in society for the curable cases, life under protected conditions for the incurable.

Another service which the public school can perform is that of acquainting the public with the gravity of the situation and the need of greatly increased facilities for dealing with the growing menace of the feeble-minded. To this end it is important that permanent records be kept which will afford cumulative evidence of a convincing character. Such records have been kept in Springfield. During the past six years thirteen pupils have gone from the class to the state institution at Waverly, sixteen have regained their places in the school grades, three have entered parochial schools, eleven have moved away, and eighteen are regularly employed. Twenty-nine have had physical defects remedied.

In the words of Dr. Fernald of Waverly, Mass., from whom I quote:

> The one great deduction from the sixty years' experience in the education of the feeble-minded is that under the best conditions only a very small proportion even of the higher-grade cases become desirable members of the community. They need protection and care and the family and community should be protected from their certain tendency to drift into pauperism, prostitution, and crime.
>
> It should be remembered that under the most favorable conditions hitherto, a very large proportion of feeble-minded persons, even of the higher grades, eventually become public charges in one way or another. No one familiar with the physical and mental limitations of this class can believe that any plan of education will ever materially modify this fact. Any relief as to public support to be obtained from public-school training can be only temporary. Feeble-minded children may be tolerated in the community, but it is a great responsibility to inaugurate any plan on a large scale which does not withdraw from the community the defective adults. The feeble-minded are powerless to resist the physical temptations of adult life and should be protected from their own weakness.

C. THE CITY TRADE SCHOOL—AN IMPORTANT INSTRUMENTALITY FOR IMPROVING THE VOCATIONAL NEED OF THE CITY CHILD

CARROLL G. PEARSE, SUPERINTENDENT OF SCHOOLS, MILWAUKEE, WIS.

As young people grow up they betake themselves to various avocations. Some enter commercial pursuits; they become bookkeepers or cashiers or stenographers or salesmen, or in some such manner have to do with buying and selling or the records thereof. Some enter the professions and become doctors or lawyers or engineers or preachers. Some become farmers or stock raisers, and coax the soil to give up its wealth. Some are laborers who do the unskilled work of the world for the unskilled workman's wage.

Some find their way thru the more or less difficult channels which lead into the skilled trades and become craftsmen, or craftswomen.

The state has long recognized its duty to provide vocational training of certain sorts. Engineers and doctors and lawyers, as well as farmers and dairymen, have long been taught for their work at state expense; of late years the need of commercial training has been fully recognized and vocational training of this kind is now given in a multitude of high schools.

But not all young persons wish to enter the professions, or to work in commercial lines. A considerable number wish to learn trades and become craftsmen. A considerable number, also, of the contingent who now drift into some form of unskilled labor, have the ability to become skilled mechanics if a suitable opportunity were given and their attention turned to the matter. There is a demand for some adequate means whereby these young people can learn trades.

But this is true not merely from the side of the young people; the manufacturing and building employers want more good mechanics than they can get. The supply and quality of skilled craftsmen is not being kept up. And this need felt by employers is supplementary to the need of the young people who must have the proper training to fit them to fill the responsible places into which the employers of skilled labor would be glad to put them. It is reasonably clear that some means, either old or new, is required to supply this demand for industrio-vocational training.

The old methods of training skilled mechanics have broken down; they are not, today, producing either the number or the quality needed. This situation is probably the result of two causes: first, not enough youths enter upon and complete apprenticeships; second, those who do serve apprenticeships do not get the same kind or quality of training which apprentices received a generation or two ago.

The shoe is no longer made by a single shoemaker, who cuts and lasts and soles and binds and finishes; it is made in a factory where the completed shoe has passed successively thru the hands of a score or two score of pieceworkers, each contributing a single part or performing a single process. Commercial considerations usually keep each worker at the single process or machine at which continued practice gives to him most speed, and to the establishment most profits. Few, very few, have a chance to "work thru" all the processes of the trade and become familiar with all the machines; the great, the very great majority become pieceworkers or partmakers. They do not know, and if called upon, could not do, more than the one or the few processes thay have learned. In other trades, machinist and toolmaker, carpenter and joiner, blacksmith, weaver, the same change has come. Under these conditions the manufacturer develops the "machine-tender" instead of the mechanic. And, because they are able to get along with a smaller proportion of men skilled in all departments of the trade, employers sometimes take no apprentices, and thus dry up their supply of skilled labor.

In the shop the apprentice of today seldom learns his trade under the eye of the master, the owner of the shop, as he did in the past, until within a generation. Instead of a sympathetic and kindly master, who had a personal interest in the lad and charged himself with his instruction and development, he works as one of a roomful of men; the foreman feels responsible, not for the development of the apprentice, but for the profit to be made out of the apprentice's performance; it is likely to be, in his eyes, far more important for the lad to get skill in a few processes by which he can learn quickly to turn out profitable piecework, than to take all the exercises and learn most thoroly all the departments of his handicraft. The boy learns what he happens to, what he can pick up, and what is necessary to enable him to become, most quickly, a profit-producing member of the working crew. Under these conditions, with the probability that he will be able to learn only the fragment of a trade, is it strange that the boy is discouraged by the prospect, and goes into another line of work, or drifts about trying various forms of unskilled labor? And sometimes the regulations of trades unions prevent boys from entering upon apprenticeship. The rules of the union perhaps provide that only a certain number of apprentices shall be allowed, in proportion to the number of journeymen; the quota is full, and the boy must seek something else.

To meet these conditions which have arisen in our day, the trade school has been established and seems certain to become more of a factor each year, in the education of both boys and girls for at least the commoner skilled handicrafts.

Trade schools may be classified as of two general types: First, that type usually thought of when the term "trade school" is used in this country; a school equipped with all the requirements for work at the trade and manned by skilled teachers, themselves masters of the trade taught; a school to which a youth of proper age may come and learn all the things an apprentice should learn in order that he may take his place in the trade as a "graduate apprentice," or "beginning journeyman." Second, that type of school probably most commonly found abroad, a type often in the minds of persons who have traveled abroad when they speak of "trade schools"; a school to which apprentices learning the trade by that system, and even journeymen already practicing the trade, may come in the evening or during some hours of the day, and receive instruction in departments of the trade which they cannot get so quickly or so well in the shops, and also in mechanical drawing and in the knowledge of scholastic subjects which will make them better mechanics.

This latter type of trade schools, now successfully operating in a number of cities, is likely to be most easily established and less costly, and can be made to serve in the near future the youth of many cities which are not yet prepared for, or cannot at present afford, trade schools of the other type. The benefits of schools of this sort may be promptly realized upon in the form of a supply of young mechanics of improved general quality in the community.

For the boy who desires to learn his trade at the school, as well as for that one who for one reason or another is excluded from an apprenticeship, the trade school of what has sometimes been called the American type supplies a very real need.

Along with many and marked advantages, such a school has some disadvantages in the teaching of certain trades. In some building trades especially, it will probably be necessary for the apprentice to have at least a limited experience on outside work, "on the job," before he is as self-reliant and resourceful as the lad who served his apprenticeship in the old way, before he is as able to put things together and fit into the general scheme, under the varying conditions in different buildings, the parts of the job for which his trade is responsible. But the boy from the school has the best instructors to teach him in all the branches of his trade and not only to teach him all parts, but the best way to do each particular thing; the boy trained outside does not by any means always have this. And the boy from the efficient trade school will more quickly get the necessary practice and expertness in making ends meet—adapting means to ends—than the "outside" boy will get the knowledge of reading and making drawings, of the mathematics that relate to the trade, and the general knowledge regarding it, which are rarely given to an apprentice in a commercial shop.

The trade school of this type does not give to any graduate the speed in certain trade processes which the "outside" beginning journeyman is likely to have. This, however, is a minor matter. Such speed is the fruit of repetition and practice; it is acquired in a few months—often in a few weeks. As soon as this is accomplished the trade-school boy is more valuable to his employer on account of his more complete and better-rounded training, and his superior general knowledge of the trade and its processes, and the principles which underlie it. The foreman of an important department in a great industrial plant recently said that, while trade-school boys sometimes lack speed on first leaving the school, the handicap soon disappears, and thereafter the balance lies in favor of the trade-school graduate. A large employer of labor has stated that, of two boys entering at the same time upon the learning of a trade, one devoting four years to a regular apprenticeship, the other, the two years usually required for a trade-school apprenticeship, and then going to work at the trade, by the time the shop lad has finished his apprenticeship at the end of four years the trade-school graduate is so universally superior that there is no comparison.

It was the fashion, when schools like the Williamson School of Mechanical Trades, the David Rankin, Jr., Trade School, and the Milwaukee School of Trades for Boys first came into notice, for skeptics to proclaim that such schools could never teach real mechanics; the plant might look very nice, but skilled craftsmen could be made only by the old system. The experience of a few years and the showing made by the graduates of those schools have already dissipated these gloomy prognostications. The graduates get places. Sometimes the prejudice of foremen or employers makes it less easy than it ought to be, but all who want places get them. And after they get the places the trade-school graduates hold their own. The best proof of such a product is its satisfactory use under regular commercial conditions; and the employers of these young people have no question as to their value or to the success of the trade-school training. Only those who do not know continue to maintain that trades cannot be successfully taught in properly equipped and officered trade schools. In a few years this claim will be heard as infrequently as the claim that schools of medicine cannot properly educate doctors, or law schools fit lawyers for successful practice at the bar.

A good illustration of the money value of the training given in a good trade school is the showing made by fifty of the fifty-one members of a class (the fifty-first did not report) which graduated in March, 1910, from the Williamson School of Trades. Six months after graduation fifty members of this class, 12 bricklayers, 13 carpenters, 4 steam and electrical engineers, 11 machinists, and 10 pattern-makers, were earning an average wage of $16.60 per week. Incidentally it may be noted that all but one of the fifty reporting liked the trade, and all but two were working at it. Of these two, one, a carpenter, owing to temporary dullness in his trade, was inspecting material in an automobile factory, intending to return to work at his trade as soon as possible; the other, a pattern-maker, was working as draftsman. One year later, eighteen months after their graduation, the fifty were receiving wages averaging $18.05 per week. Another incident may also be of interest. Up to last April the Milwaukee School of Trades for Boys had graduated 12 pattern-makers, 12 machinists, and 10 plumbers. Of these thirty-four boys, 2 were working as draftsmen, 1 was working in a foundry during the dull season for plumbing, 1 was taking postgraduate work at the School of Trades, 1 was a student at the university, 1 in business with his father, 1 was just graduating; the other 26 were working at their trades. Of these the average wage of the ten pattern-makers, counting the same number of hours as in case of the graduates of the Williamson School, was $17.41 per week; the wages of the nine machinists was $17.89 per week; the wages of the seven plumbers, $29.43 per week. These twenty-six young men were earning an average weekly wage of $20.81. The average time these young men had been working at the trade since graduation was eighteen months. Only casual consideration of the matter is required to make clear to anyone how the wages of the graduates from these two trade schools compare with the pay of the average young man under twenty years of age who has entered some unskilled employment to work with his hands. The Milwaukee School of Trades for Girls has been in operation a trifle more than two years and only seven graduates have been sent out; but some facts are already established. The girls from the school who have completed only a part of the course in millinery are in demand in the shops and wholesale houses at wages from 50 to 100 per cent higher than girls of similar age who are at work in various unskilled employments; girls who have only passed two or three of the six parts of the course in dressmaking are now able to go out and earn, either in dressmaking shops, or as dressmakers in private homes, wages that compare well with those of girls from the millinery department.

It is objected to trade schools that they are expensive, that is, more expensive than most other schools supported by the public. It is even alleged that it costs $200 or $300 a year to educate a boy in such a school.

Probably trade schools are more expensive now than they will be by and by, when plants are built and equipment installed, the most effective and economical plans of administration and instruction ascertained, a sufficient supply of well-prepared teachers at hand, young people and their parents educated to the value of the education which the schools offer, and the school plants filled so as to utilize them up to their capacity. But it may be that even a cost of $200 or $300 a year, for some two years, is not an exorbitant price to pay for the making of a first-class mechanic.

Someone has said that "to pay out $2,500 to make a $1,000 boy" is educational waste. Is it, if by "a $1,000 boy" is meant a boy who can earn at his trade $1,000 a year? I have recently been looking up some manual-training instructors. Several intelligent mechanics have applied for these positions. I have found that all of those who measure up at all to the requirements in their ability as mechanics are able to earn from $900 to $1,100 a year. Perhaps a skillful, steady mechanic is about "a $1,000 boy." If so, at 4 per cent he might be capitalized at $25,000. It is doubtful if the average unskilled laborer earns more than one-half of $1,000 a year. His earning power, say $500, if capitalized at 4 per cent, amounts to $12,500. If an investment of $2,500 in a couple of years would increase the capitalized value of a man by $12,500, it would not be so bad. But when that cost is not more than $600, and in two years can increase the capitalized value of a man's service by $12,500—more than twenty times the amount of the investment—is such an investment to be denominated "educational waste"? Instead of being rated as an "expense," money paid out for the trade schools ought to be considered as an investment; and if the school is managed with reason, and turns out a product of good quality, the investment should be rated as a good one.

The trade school is not meeting all the need of the community for vocational training; but it is meeting an important part of that need, and meeting it in an effective manner. It is meeting it, too, at a cost which is not unreasonable.

D. HOW SHOULD THE SCHOOL SYSTEM CONTRIBUTE TO AN INTELLIGENT CHOICE OF VOCATION ON THE PART OF THE PUPIL?

GEORGE PLATT KNOX, ASSISTANT SUPERINTENDENT OF SCHOOLS, ST. LOUIS, MO.

The limits of time and the scope of my paper do not admit of a discussion of the question: "*Why* should the school system contribute," altho the temptation is strong to plead the advantages of the measures I shall propose, but I address myself at once to the proposition: "*How* the School System Should Contribute to an Intelligent Choice of Vocation on the Part of the Pupil."

The fields affected by the proposed activity are the child, the influences which make him what he is, and the life-calling which he is to follow. The public-school system is but one of the organized forms of society, and our problem is to minister to the need of the pupil intrusted to our care by pointing him as successfully as possible on his way. To accomplish the best results we must understand the child, be alert to all the other forces which influence him, know the facts of the vocations which he may enter, and by continued instruction and sympathetic interest lead him to choose wisely and stimulate him to do his best.

We must not be content simply to direct the child, find a place for him, and launch him forth on his life-work, altho this process is easy compared with the better way. Our aim must be to bring the child to understand the real values in his environment and to detect the best opportunities open to him for a life-work, and then so far as possible lead him to choose intelligently which call he will follow.

It should not be our aim to determine for the child and his parent what he should do or into what vocation he should enter. Workers in vocational guidance should stand most firmly against the suggestion that we are to force the youth of our land into certain established occupations or trades according to a predetermined schedule or prearranged scheme. If we are true to our democratic ideals, we shall not permit any group of men or any authority to dictate what shall be the occupation of the child, nor should we ourselves make such an attempt. For any organized effort whatsoever to say that so many children may be taught a certain trade, or that this child may learn it and his neighbor may not, is a usurpation of function which must not be tolerated.

To choose wisely one's vocation, an appreciative knowledge of the immediate environment is essential, for altho there is so much movement today from place to place in the pursuit of a livelihood, the vital factors in the environmental conditions are really the same, even if they are more or less colored by geographical influences.

We must help him to understand the vocational opportunities open to him. It is pitiable to what a large extent choice of vocation is made quite in the dark. If we can only give to our youth a fair understanding of the nature of the opportunities open in professional and industrial and commercial lines, we shall make a great advance over present lamentable conditions.

We must help the child to understand also the responsibilities involved in his vocational life, since they exercise so strong a determinative influence on his larger service as a citizen in a great democracy.

We must urge the value of preparation. One of the surest signs of a lack of wisdom in choosing a vocation is the evidence that the youth and his advisors lose sight of the far-reaching importance of adequate, patient preparation.. This preparation should both precede and follow the choice of vocation. The choice will be much more intelligently made if preceded by studies in the relative values of vocations, while it is easily demonstrable both logically and statistically that after the choice is made time and effort devoted to preparation more or less specifically provided for the vocation chosen are most wisely spent. The general public does not see this, and it is a very large part of our opportunity in vocational guidance to lay emphasis on patient and wise preparation. This proposition rings true to the great thought of lengthening the period of infancy, and needs no championship on this platform.

We are not, in this paper, to discuss the propriety of the public school doing something, altho we know that we are hedged about by tradition and deterred by a certain sensitiveness arising from professional obligations fancied and real; we shall not concern ourselves with the feasibility of the scheme, altho we admit that we are restrained by legal rights and restrictions; we shall not stop to argue the question of its advisability, altho we are faced with a popular conception of the domain of the public school which is in many quarters very limited; we are set to consider what the public school *can* do and how best it should do it in spite of the charge so often brought against us that we lack initiative.

What, then, and how should the public school contribute to an intelligent choice of vocation on the part of the pupil?

In the organization of the work, very large attention must be paid to investigation, both preliminary and continuous. Investigation to be adequate must cover three great fields: the child, his environment, the vocations.

The child must be considered physically, mentally, and temperamentally, for not only is the welfare of the whole child at stake in this transaction, but the work will go astray if the factors which spring from these phases of child nature are ignored.

Investigation of the child may best be accomplished by enlisting both the judicious interest of the teacher and the trusting frank assistance of the parent. Neither the teacher nor the parent alone can make up a fair analysis of the characteristics of a child which will fit orunfit him for certain occupations or professions. Ignorance of these characteristics is fatal to a wise choice. This work should not be haphazard and unorganized, but it must be made very definite and specific as to the points to be noted and the results must be made permanent and accessible to those who have a right to use them. This information should be gathered only by qualified persons and prepared and used only by competent parties. Efficiency is promoted by the employment of expert investigators who will secure from parent and teacher the information desired, but if this is impossible, at least the questionnaire should be prepared by the expert. With this chart as a guide, the teacher can evolve the information in conjunction with the parent. I wish it were my privilege to plead here and now for the propriety of placing this work in the hands of a public-school worker carefully chosen, who would bring to it the devotion of a teacher and the skill of a trained student of child nature, and at the same time be armed with the confidence of the public, without which there can be no large success.

Not only must the child be studied before he makes his choice of vocation, but he must not be lost sight of in case the school can hold him for better preparation. For the sake of the extremely valuable information to be gained only by experience, the youth who has passed out into his vocation must be carefully and persistently followed up, his successes or his failures noted, and his trials and efforts made a part of a record which shall guide those who later come to choose, to make their choice more wisely. For this work, a central office more or less specifically designated is desirable. It may be done by the principal of the school last attended, or by the teacher who knows the pupil best. The exact method depends upon the complexity of the school system, but the information is too valuable to be allowed to slip by unnoted.

Children who go to work by permit can be followed up by securing legal requirement upon the employers of such child labor that every case of discharge or of voluntary withdrawal shall be by them reported to some designated office. Such action also prevents the child thus quitting work from drifting about in idleness or loafing.

The environment must be investigated and should include a careful study of the usual factors: the home, the church, and the unorganized social influences. It may or may not be wise to have this portion of the study conducted by organized activities and made to take the form and nature of a general "survey" of economic and social conditions of the community. Such work is invaluable, altho it does not entirely meet the need of careful study of these phases of the environment of the individual child who is to receive guidance. A general survey conducted scientifically serves as the best basis for the rounding out and interpretation of the facts ascertained in the consideration of the individual case. We must have knowledge of the home conditions in which the child has developed. Are both parents living, are both present in the home and ministering to its welfare, how many children in the family and how many already at work, the occupation of the father and other wage-earners, something of the nationality and school training of the parents, the present economic pressure bringing real or apparent need of early entrance of the child into his vocation, locality and housing of the home, its moral and spiritual tone, recreational habits of the family and of the child—these and other inquiries are most pertinent if the counselor is to assist the child understandingly.

Conditions of the church and larger spiritual influences on the child are commonly considered as outside the realm of proper inquiry, but careful consideration develops salient factors, altho they function indirectly.

Unorganized social influences have tremendous weight on the growing child. One scarcely knows where to begin. The street influences, in which all too often the child moves from school until bedtime, vary all the way from legitimate occupation, such as paper-selling, down to loafing and gang rowdyism. Then, the cheap amusement places claim their great army and with or without proper supervision our school children frequent popular amusements and absorb their not carefully chosen lessons so vividly presented.

A knowledge of the vocations is essential. The opportunities offered vary greatly with geographical and political influences reacting to make varying economic conditions, so that a study of the opportunities offered in one locality does not at all suffice for another community more or less distant. Here is where the local color comes in and necessitates a great amount of work before a fair grasp can be had on the problem. The points to be covered include the temporary and relative openings in the various professions and industries, and the conditions, physical and moral, which impose demands upon the time and strength and health and morals of the worker who enters. This investigation should include questions of wage, initial and future, of the opportunities of advancement to positions of commanding influence, the hours of labor, the sanitary conditions, with their effect upon the physical and moral health, the helps and hindrances in the opportunities for individual initiative and invention, and many other factors familiar to all who have watched the development of the problems in vocational guidance.

Present points of contact between the seeker and the opening offered must be investigated, such as the activity of employment agencies, official and unofficial, maintained from philanthropic motives or for private gain.

The provisions open for specific vocational training, such as professional schools of law, medicine, dentistry, etc., the so-called business "colleges" with their short-time courses, the plumbing schools, automobile schools, millinery colleges, dressmaking institutes, schools for the training of barbers or waiters, and the like, must all be critically examined and necessitate careful discrimination. Note must be taken of those occupations in which training is provided by the industrial concerns and by public utilities, such as the telephone and street-car companies. Recognized institutions of college, university, and technical standing are, of course, most worthy, and the opportunities they offer must be included in a fair knowledge of avenues of training for the occupations.

All this material covered in my too brief survey must be collected by experts who are trained to see clearly and to judge wisely. It must be brought together, organized, and systematized also by experts. Further, it must then be recast into popular form so that those who are in immediate contact with the child—the teacher or the parent—shall be able to use this information effectively as tho it were a matter of their own investigation and knowledge. This organization and adaptation following after the investigation is a vital point, for it is a large part of the equipment of the counselor.

Before leaving this question of organization, we must consider the linking-up of the forces at work. There is room enough for all who care, but all the workers, philanthropic, official, and parental, should be organized and brought into co-operation so that there shall be no duplication of effort, no work at cross-purposes, no stumbling blindly in the dark when the saving information may be ready prepared, close at hand, and yet not known to the needy one. Here is one of the greatest points in favor of the organization of vocational guidance under the care of the public-school system, because without an authorized head to the work, the agencies interested fail of mutual appreciation and support and there is much loss of time and effort. With such an organization, the person in control not only gives specific direction, but communicates inspiration, disseminates information, and provides for the correlation of the workers as can be done in no other way. As I have said, there is room enough for all, but no effort should be wasted, and the energies can best be conserved and efficiency promoted by the single director who shall have behind him all the power and the prestige of the public-school system.

The complexity of the organization of the particular system must determine the specific office of this director. Whether the system be that of a state or county or of the rural schools, successful conduct of the work demands some *one directive mind*, who shall be able to see clearly the entire field of activity, and both vitalize the work and safeguard its efficiency. In the large system, the ability and strength of a director of vocational guidance will be severely taxed even with all of his time devoted to this effort, while under other conditions the county superintendent or school principal may well care for this in connection with his other duties.

Let us now pass to the consideration of the specific vocational guidance of the child. Simple direction or dictation may be accomplished in one interview, but not true guidance. Either the teacher knowing the child and informed about the vocation, or a worker knowing the vocation and informed about the child can in one interview accomplish much that is desirable, but the guidance of the child vocationally is a matter of education as well as of information. Education takes time and involves training, and the preparation of the child for a wise choice of vocation can be done best by the schools.

Well down in the grades, even in the kindergarten, the life-work interest must be developed in keeping with the advancement of the child. Industry, commerce, and the arts are the sources of material, while number work and reading in the lower grades, arithmetic, geography, and history in the intermediate are the main processes thru which the child is equipped. Handwork plays a large and ever-increasing part in prevocational training. Supplementary reading and the library furnish rich food. The museum with its illustrative material makes its unique contribution. Classes from the schools should visit local industries, centers of trade and transportation, public utilities, etc., while from all these, and from the professions as well, competent persons should be secured to come to the school and there present vividly, either with or without illustration, the salient factors and conditions of their own vocation.

With all this material worked out in adequate methods and the teacher alive to her opportunities, even the child who must enter an occupation at the earliest permissible moment will leave the school with a considerable equipment for wise choice of life-work. Those who remain for the upper grades and the high school—and their number should be much increased when the life-motive is infused into all their work—will receive a larger view of vocational opportunities, especially looking toward the professions.

Such vocational content will be welcomed by the teachers, but its preparation must be accomplished by the supervisory office of the school system, preferably by the vocational director, who must be well trained in school work.

A further necessary equipment for wise vocational guidance is the preparation and dissemination of literature setting forth the facts secured by investigation. Some of the work already done in the gathering of material into printed form and published as charts and pamphlets has proven to be of greatest value. This printed information can never take the place of personal consultation between the teacher, the child, and the parent but it is essential as a preliminary source of information for teacher and parent.

Who shall serve as counselor to the child and parent when the time comes for decision? By all means the teacher, and by teacher I mean either the one in the classroom or the principal of the school, but in either case it must be one who knows the child, the vocational content in the course of study, and the material prepared from the investigations. It has been proposed to give over this personal consultation to an expert called in from the particular vocation, who, knowing the vocation, shall advise (and doubtless induce) as many children as possible during the visit. An address to the students by such expert may be decidedly illuminating, but only one who knows the child can render the high service of properly guiding him in his choice of a life-work. As our school systems are at present organized, either the school principal should act as counselor or else a teacher in the upper grades who knows all the pupils and who is by virtue of the school work in closest contact with them should serve in this important capacity. In the high school, a carefully selected group of teachers may be given the work. Those teachers should be selected who *care most,* and who are temperamentally best fitted for this delicate task. For more is needed than simple advice—the pupil must be aroused, steadied in his choice, and then set on his way of preparation or, if it must be, inducted into the work with high purpose, clear vision, and large enthusiasm.

At this time of decision regarding the course to be pursued, the counselor should make every possible effort to urge upon the parent and the child the value of adequate preparation. One of the best results which it is hoped will accrue from vocational guidance is that children shall be held longer in school, and better still, with an added interest in their school work. Vocational guidance to be worth anything must, so far as consultation goes, be individual in character—one child at a time, with the parent in conference with the counselor. This process is necessarily very expensive, but if it results in markedly lengthening the school life and ministering to the school interest in the child, who shall say it is not worth while?

The conferences between child and counselor should be frequent, with the parent present at strategic times. The best place is the school building, the time to be arranged to suit the local conditions. In some schools, a vocation office is maintained with announced hours for consultation. For those parents who cannot come to the school or who are free only in the evening, opportunity must be offered for them to secure information and advice from the office of the vocational director who is in charge of the work thruout the system.

This central office must, in the nature of the case, be maintained by the public schools. From this office the work should be guided and the records of investigation should be kept here after they are prepared for use. It may well be the workshop of the experts in the preparation of the material gathered and the point of issue from which the investigators daily go forth in their work.

The teacher who is intrusted with the privilege of meeting the child in his guidance, vocationally, must add to a ready interest and abundant enthusiasm a certain amount of skill. While much can be gained from experience only, one of the strongest avenues of effective work on the part of a vocational director's office is the systematic training of the counselors, either by regular meetings or by repeated conferences, or still better by both. The directive head of the work should minister to the worker by a consistent course of training and a never-failing source of enthusiasm. The counselors may well be organized into committees for mutual assistance, and general meetings for discussion of problems have proven to be of inestimable value.

Possibly thru the avenue of the interest of the child we can best touch the parent and enlist his co-operation. The parent must be reached, and only when we interest all those who have children in our schools and influence them effectively, can we feel that we are really occupying the field. Printed literature does much good if carefully disseminated. The vocational director can give splendid service thru enlightening the community and arousing enthusiasm by means of addresses, illustrated talks, and popular press articles.

Employers must be enlisted and their co-operation enjoyed in vocational guidance. The experience of the workers who are already engaged proves almost without exception that employers are easily interested and are glad to co-operate, both for the help they can give and from the fact that their own welfare is advanced by such activity. This also requires careful planning and wise direction of the details involved.

The central office of vocational guidance, appointed and sustained by the public-school system, may or may not engage in the actual work of placing the child. The question of the maintenance of an employment bureau by this office is debatable, and with the advantages and disadvantages so nearly equal, no solution is yet ready. But the employment bureau either should be maintained by the school system, or, if by private parties, should be in some way absolutely under the control of the public-school vocation office. If the state maintains an employment bureau, it should work in harmony with this vocation office, either by legal enactment or by official agreement.

Either with or without an employment bureau, careful attention must be paid to "follow-up" investigation, as earlier outlined. Some of the most valuable information can be secured by watching closely and recording the careers of the individuals after they have entered their vocational life. Questions of permanency, of advancement, of adaptability, of advisability can best be considered in the light of information thus gleaned.

The great American public believes in its schools and trusts its school officials. Activity in vocational guidance will be welcomed by the community at large and it is easy and advantageous to organize committees of public-spirited men and women to co-operate with the school vocation office and give assistance which is invaluable in the way of advice, sympathy, and support. Here, again, local conditions must determine the form of the organization.

Finally, experience only will give us the wisdom best to conduct this work. I believe very strongly in the advantage of a central office maintained by the public-school system in which all parties at work in vocational guidance or in investigation leading thereto shall be sympathetically and organically connected. True vocational guidance includes consistent training of the pupil in the school and at the critical times personal consultation with the sympathetic teacher his counselor.

Investigation, organization, co-operation, devotion: these four, and the greatest of these—devotion! The youth of our land call us to ever renewed effort in their behalf. The wide-open door of opportunity for us public-school workers is today labeled "Vocational Guidance." Let us thoughtfully, carefully, bravely, and devotedly enter in!

E. THE EDUCATION OF GIRLS

LORENZO D. HARVEY, PRESIDENT OF STOUT INSTITUTE, MENOMONIE, WIS.

A generation ago discussion waxed warm upon the question of the physical and mental ability of the girl to do the work prescribed for her brother in the higher educational institutions, in the same time and in the same way that he was to do it. The opening of the doors of these institutions to women on the same basis as to men, and the success of the girls in them, is a sufficient indication of the answer to that question. The discussion has practically been closed. The girl has demonstrated and is demonstrating her ability to achieve success in the highest fields of educational effort. But the settlement of that question has not settled the other—whether the girl needs and should have the same education as the boy. Until very recently, the organization of school systems, the framing of courses of study for elementary and secondary schools, and of the curricula of higher educational institutions have proceeded upon the assumption that the needs of the boy and the girl in education were the same, and to be met thru the study of the same subjects. These subjects were chosen, and their scope determined almost solely with reference to the boy. It was left for the girl to proceed along the same line if she were to proceed at all. Some men and many women have argued effectively for the right of the girl to follow in the educational footsteps of her brother—until that right has been conceded. In recent years, the question as to whether this is the only right to education possessed by the girl has been coming to the front, until today it is one of the most important questions to be considered in connection with the development of our educational system. Some concessions have already been made—the introduction of sewing and cooking as subjects of instruction in many public and private schools is a slight recognition of the fact that the girl needs for her training something that has no place in the training of the boy.

The elective system in the higher educational institutions, coupled with the conservative admission of subjects that might be attractive to girls, if not to boys, and the election of these subjects by many girls, is a further recognition of this difference in needs. A serious consideration of the question discloses the fact that an adequate differentiation of the materials, means, and methods to be employed in the education of girls and boys has not yet been made. We have been for years multiplying special, technical, and professional schools of varying aim and scope to fit boys and young men for the active duties in life, growing out of changed industrial, social, commercial, and political conditions. These schools have come into existence because of the demand for that kind of education which shall fit young men to do what, by reason of their manhood, they may do, and by reason of the requirements of society, needs to be done. Many of these schools throw their doors open to women, and a few women have availed themselves of the opportunity thus afforded. They have not proved attractive to girls in the same measure as to boys, for the reason that the world recognizes certain classes of work as peculiarly men's work, and other classes of work as peculiarly women's work. That some women and fewer men do not recognize this distinction does not alter the situation. If a woman conceives herself able to do the work which society at large has regarded as the work of a man, she has an opportunity to fit herself for it, and if she can find employment, she is at liberty to engage in it, but the fact remains that her entrance upon this field of activity is only an incident. With the man it is a life-work—with a woman it is liable to be interrupted at any time by the demands of her womanhood for home and family life. Few women have the physical and mental strength to meet the demands of the home life and the demands of a vocation or a profession outside of the home, and win success in both. That one occasionally does, is no warrant for assuming that it is a general rule. That she wins success outside the home at the expense of the home life is an admission of failure.

The immense broadening of the field of educational effort for men in recent years is not an accident. It has come because we have been studying the needs of the individual, of society, and of the state. We have been finding out what a man needed to know and do in order to measure up to these demands, and have been framing courses of instruction to more definitely fit men to do this work. We need to study the question of the education of girls seriously, and from the same standpoint. What a boy needs to know and to do to fit him for success in any of the useful activities of life upon which he desires to enter is the basic element in determining the character of his education. What a woman needs to know and to do in order to meet the responsibilities that come to her in life is the basic element in determining what her education shall be. There is an immense amount of work needed to meet the needs of society that a woman cannot do and ought not to undertake, but which a man can and ought to do and do well. He should be fitted to do this work. It is a waste of time and energy to try to educate a woman for that work. There is an immense amount of work needed in the world which a woman can do and which a man cannot do and ought not to undertake. The absurdity of trying to educate him to do the work for which he is unfitted by reason of his sex has been recognized, and it has not been attempted. There are many lines of work needed to be done in the world which men and women may do equally well. Equal opportunities should be given for the education of each in the direction of efficient performance of these lines of work. In the lines of general culture and training, the education of men and women may be the same—but in so far as their work varies and demands special knowledge, differing in one field from that in the other, in so far as effectiveness in action depends upon special training required in one and not in the other, the necessity for differentiation exists.

Today we are realizing as never before the lack of efficiency in the vast majority of those who do the work that society demands. If the possible efficiency of the farming population were realized, the products of the soil now under cultivation in the United States would be increased at least 100 per cent. We are beginning to realize this fact, and hence the demand from all parts of the country for the sort of education for the country boy and girl that shall hasten the development of this efficiency. The manufacturers realize the inefficiency of their employees of every grade, and these employees, if they do not fully recognize their own inefficiency, see the lack of those kinds of educational facilities necessary to develop efficiency in their children, and they unite with the manufacturers in demanding a place for industrial education.

The great transportation companies are admitting the lack of efficiency among their operatives and are providing the educational machinery for securing it. Workers for civic and social uplift find themselves handicapped by the inefficiency of the agents thru whom they must work, and in response to their call for help, educational agencies are being provided to develop competent workers in these fields.

The impulse of this awakening to the call for efficiency is felt everywhere thruout the length and breadth of the land, and the demand is becoming more insistent every day for such a broadening of educational means and ends as shall make it possible for those who are to do the work that society needs to have done, to acquire the knowledge and training essential for efficiency in the doing. The demand is no less for the cultural element in education, no less for the highest professional and technical training for those who have the ability and inclination to secure it, but there is an added demand for the millions who have neither the ability nor the inclination to secure this training—a demand that educational effort shall be directed toward preparing these millions to do something well that needs to be done in order that they and society may both be benefited by their increased efficiency in doing. A narrow range of useful knowledge coupled with efficiency in its use is better for the individual and for society than a wider range of knowledge, useless or useful, without efficiency in action.

The home is the unit of society: within it are found influences and forces that are most potent in shaping the life of the individual, in determining the state of society and the character of the national life. From it have come the millions who constitute the population of this country. From it come every year more than two million new-born citizens. Within the next decade there will be born more than five times as many children as there were souls in this country when we became an independent nation, and two-thirds as many as there were people living in the United States when the Civil War began. Thru infancy, childhood, and early youth, the care and nurture of the individuals composing this vast army is a most important part of the work of the home. The physical condition, the shaping of tendencies, the character of habits formed, the mental and moral development of the child, the promise and potency of later life are influenced most profoundly, one may say are determined almost exclusively, by the influences of the home life. Are these influences and forces of sufficient importance to demand intelligent effort to prevent their being left to be the sport and play of ignorance or accident?

How much is involved in the two words *care* and *nurture* of the child! For its proper care, there must be intelligent action, and intelligent action must be based upon a knowledge and proper care of the physical organism of the mother and her child; of what is essential for both for the best physical development of the infant, and later, of the child considered solely as a healthy animal.

It is thought to be necessary for a farmer who would raise hogs or poultry successfully to study the structure and organism of each type, the properties of foods best adapted for their development, the preparation of these foods, the proper times for feeding, and the variety and amount of food to be given at different times and for different purposes. Few realize how much more difficult is the problem of feeding the child. It comes into the world perhaps the most helpless of new-born things. Of the two million children born annually, one in six dies before the end of the first year; one in three by the fifth year. Boards of health, physicians, and scientific experts who have investigated this subject unite in declaring that a large percentage of this death-rate is due solely to ignorance on the part of those responsible for the feeding of the child.

It is impossible to say how large a proportion of the illness of adults in the home is due to the same kind of ignorance—ignorance of what is proper in food, of what is proper in its preparation and care, and of what is essential in amount and kind to meet the varying needs of the older members of the family.

Connected with this single problem of feeding the family is another of no small importance, and that is the economic problem. The bearing of this problem on different members of the family is one of vast social and industrial importance. Proper feeding of the family, when no account has to be taken of expense, is a simple proposition compared with the proper feeding, when at every moment the lack of money makes wise choice and proper preparation of food a much more difficult problem.

The health of the different members of the family as affected by other causes than incorrect feeding is a matter of vital importance. Knowledge of the proper means for the prevention of disease thru proper sanitary conditions in the home, proper care of the person, and of means for the prevention of bad effects from unavoidable exposure, immediate treatment in cases of accident, and the proper-nursing in case of illness are essential for the proper discharge of the responsibilities of the homemaker.

Sanitary conditions in and about the home as related to heating, lighting, ventilation system, water supply, sewage disposal, and care of drainage system, are factors affecting the health of the family.

The clothing of the family, involving wise choice with reference to economy, adaptation to needs, durability, care, and pleasing effect, is another subject demanding a wide range of knowledge and skill in order to secure the best results.

The housing of the family, involving wise selection of furnishings and decoration, is another responsibility devolving upon the homemaker, requiring special knowledge of wide range in order to secure the highest degreee of comfort and æsthetic effect at a minimum cost.

The development of the child's mental power and spiritual nature while in the home, in such manner as to fix tendencies and develop characteristics essential for the best and most complete later development, is a problem that may well tax the mind of the wisest individual.

This is a brief tho fairly comprehensive statement of what may be regarded as the most important of the duties devolving upon the homemaker. That these duties may be discharged with efficiency is essential for the well-being of the home, of each individual in it, and of society at large.

Who is the homemaker? She is the girl who is to be educated today and who, as the woman of tomorrow, is to assume these responsibilities. The home is a universal institution; it is found everywhere; practically every human being has come from it, and has been affected for good or ill by its influence, its direct or indirect teachings. More than three-fourths of the women of marriageable age assume sooner or later the responsibilities of the homemaker. It is the one occupation which is most universal for the woman. The perpetuity and well-being of the race depend upon the maintenance of the home and upon the proper administration of its affairs. Practically every woman looks forward to the time when sooner or later she shall assume the responsibilities of the home, and, for the great majority of them, that time will surely come; and considering their importance to the race, it seems an inevitable conclusion that no education for the girl is adequate which does not take these responsibilities into account and provide for such instruction and training as shall insure their effective discharge.

It is sometimes argued that the place for the girl to secure this knowledge and training is in the home. The complete and sufficient answer to that argument is that she does not there secure it, and that her mother is not competent to give such instruction and training, even if she had the time and inclination to do it, and if her daughter had the time and inclination to secure it. Every phase of knowledge indicated as essential for the proper discharge of the duties of the homemaker is capable of being organized for instructional purposes and it may be taught in the school. If it is not dealt with there, it will be dealt with nowhere in any adequate manner.

The woman's instinct is sometimes spoken of as a safe guide in all these matters, but in view of the results obtained, and in view of the truths of biological science, such a claim is too absurd for consideration. Not all of these matters have as yet been properly organized as pedagogic material, but this is rapidly being done. The great problem is to find a place in our present school organization where that work may be done.

It will doubtless mean the elimination of some subjects from the curriculum which girls have been required to study, not because the study of them best ministered to their needs, but because of tradition, harking back to the time when courses of instruction were organized for boys upon the theory of general culture and training.

We do not meet the situation by providing means for general culture of which at best only a limited number of girls can avail themselves. We recognize the need of special education of the masses to fit them to do something well. We are pressing vigorously for the development of this special education for efficiency in action in the agricultural, commercial, and industrial world, but we are practically ignoring the claims of the most important vocation in which human beings can engage and in which a larger number are sure to engage than in any other vocation that can be named. We hear on every hand the claims for special education for the eight million wage-earners, women and girls, to fit them to earn a larger wage and to better their social and industrial condition. Too much cannot be said upon this point and yet we are ignoring the fact that by the majority of these eight million wage-earners, the present vocation is regarded as temporary, a mere makeshift until the opportunity presents itself to assume the responsibilities of home life, and that for the assumption of these responsibilities they have had practically no preparation whatever. The woman is the homemaker, the wide range of activities demanded of her in this field of effort, the vital importance of these activities to all concerned demand special preparation which she is not now receiving. The welfare of society, the well-being of the nation depend upon the efficiency of the woman in the home, and that efficiency depends upon special education for such efficiency.

VOCATIONAL GUIDANCE

MEYER BLOOMFIELD, DIRECTOR OF THE VOCATION BUREAU, BOSTON, MASS.

Vocational guidance is not a new thing. What is new about it is the intelligent and energetic effort now going on thruout the country to organize such counsel, information, and safeguards as shall adequately protect the young people of our land during the critical passing from school to work.

The widespread interest in this matter of better bridging the transition period from the shelter of school life to the strange liberties of wage-earning indicates an appreciation of what is taking place and a deep-seated desire that the present waste shall cease.

At the time in life when our children most need watchful care and wise assistance a vast number of our boys and girls leave school in the various grades and take their plunge into working life.

There are kindly teachers, of course, whose personal help has started many a boy or girl up the ladder of success; there are homes, which still help shape the future of the child. But nobody acquainted with the heavy professional duties of the modern teacher, the difficulties and the struggles of the parents, particularly in our cosmopolitan centers of population, and the technical complexities of modern commerce and manufacture, with all their specialization and subdivision, can for a moment believe that the chance advice and help of the average parent, teacher, or busy man of affairs is at all adequate to deal with the present situation.

That thousands of children drop out of school, thru no economic pressure, to go to work as soon as the law allows, we well know. An intensive study typical of what is going on everywhere is to be found in Volume VII of the United States Bureau of Labor reports on the women and child wage-earners in the United States. It is entitled "Conditions under Which Children Leave School for Work." This study of seven carefully selected towns in the North and South proves that only about one-third of the children who left for work needed to do so. The other two-thirds could have remained.

In many cases the parents have had no voice in this decisive step. Indeed, we all know of instances where the parents did not even know that their children had left school and were at work. If any fair number of those so leaving were in occupations where they could develop, learn something, amount to something, matters would not be so serious. But this is not the case. How can untrained and unguided children find their best opportunity? How can they possibly know where they are going to come out in a few years, there being nowhere at hand the information which can spare them years of drifting, waste, and too often tragic demoralization?

To understand an occupation from the vocational-guidance standpoint is no longer the simple matter it was in the days of Benjamin Franklin, when his father took him on a round of inspection of shop, factory, and other workplaces in order to influence the boy's choice of a life-pursuit.

Were such excursions more common today, an inspection such as this would not necessarily reveal the facts one needs to have in order to judge an occupation intelligently. In the first place, consider that the making of a coat in a highly organized clothing establishment involves twenty-five and more different workers, each of whom is specializing in his own partial operation. This is true in the making of watches, pins, shoes, and other commodities; it is true in retail business, and it is the process now radically modifying professional pursuits.

But even an understanding of these subdivisions does not begin to tell the whole story. There is a growing literature on occupational diseases, industrial hygiene, public-health reports, actuarial statistics, and monographs dealing with the relation to the worker of certain operations, work conditions, fatigue, nerve-exhaustion, and general enervation. There is a considerable body of economic literature dealing with the changing demands of certain articles, and with the changing conditions and opportunities, the displacement of manual labor by machinery, of child labor by adult labor, boy work by girl work. There is a mass of social literature dealing with the moral influences of certain employments, their mental and ethical consequences. All these things and more need to be understood by somebody somewhere in order to end the present gambling in their own futures by so many thousands of our children.

Equally necessary is it to realize what the training should be for those who would enter the desirable employments. Nothing can be more misleading than the initial high wage often paid to the fourteen-year-old in occupations which take so much out of their young workers. Our studies in the vocations open to Boston boys prove that the occupations which hold out any future to their young workers often start them at a fraction of the wages paid where advancement is practically impossible. We further learn that the most desirable employments want better-fitted and more mature workers than do those which teach but little. Would not many parents sacrifice even more than they do could they be shown just where their children would come out after three or four years of work? Would they not co-operate with the schools in keeping their children longer under a system of training carefully planned to start their boys and girls on a higher plane?

Over three thousand families in Massachusetts told the investigators of the Commission on Industrial and Technical Education that they could afford to give their children vocational training.

Sixty-six per cent of the families investigated said that their children could have continued in school; 33 per cent of the children were found in unskilled industries; 65 per cent in low-grade industries; less than 2 per cent in high-grade industries.

This is not at all surprising. The boys leave for a job, not for a vocation. They leave one job after another, attracted by all sorts of reasons except that of fitting themselves for a life-work. This drift from place to place spells sheer waste to the employer, the child, and the community. And at the time of life when serious responsibilities of life begin these youth are unfitted for permanent and profitable employment.

If we need statistical evidence of the consequences of this aimless entrance into wage-earning, thru the only open door of undeveloping jobs, we need only read some of the evidence before the Royal Commission on the Poor Laws. There is unanimous testimony to the effect that the chaotic state of affairs which confronts the young people who drop out of school is daily manufacturing that most pathetic class of English poor, the unemployables. We have them here too; they are in the poolrooms and street corners of our towns, they are before the courts daily, they are crowded about the want-ad bulletins of the daily papers and drifting about the employment agencies, both public and private.

I have described only what is occurring among the fourteen-year-old children; among those who get their working papers as soon as they can. To a marked degree there is a similar want of plan and intelligent choice among high-school and even college students. Until the precious years of schooling minister more definitely and aggressively to the life-work interests of the pupils, until we awaken in telling form the motive and provide the material for a better launching into bread-winning pursuits, we shall see continued the present human waste.

What has vocational guidance to suggest as a practical way to cope with this situation? Every intelligent school official, parent, and teacher admits the value of scientific educational and vocational information. There is no argument as to the need of wise and well-informed assistance.

How shall we organize this most effectively? Doubtless there are more right ways than one for helping young people to find themselves, and I shall describe the Boston plan as a suggestion toward one way.

First, as to what we are not attempting to do. We do not prescribe or decide a particular occupation for anyone. This is the business of the parents and the natural protectors of the child at home. Decision must come from within and not from without. We are not trying to divert anyone from any class of pursuits or to direct particular attention toward them. It is not the business of vocational advising to favor or disfavor occupations. It is primarily its function to know the facts, analyze, classify, simplify, and apply them, where they will do most good. Let the facts speak for themselves, but drive them home. The responsibility rests on the shoulders of those who make the decision. But knowing the facts is no child's play, neither is their skillful dissemination.

In Boston we have made up our minds, first of all, that the public school is the logical starting-point for vocational advising. Here the best preventive work can be done; here there is the best foundation for that co-operative decision in deciding upon a life-work which brings the various child-welfare agencies into service for the individual child. Moreover, the child is under constant observation here and family problems make themselves known in countless ways.

The first step was to appoint in each school some teacher or assistant principal as the vocational adviser for that school. This fixed a certain responsibility and made a point of contact between our vocation bureau, a philanthropic body, and the teacher. For two years we have met regularly to hear the best representatives of various trades and professions tell in an intimate way about their particular callings. Many questions were asked, and the notes taken by the counselors at these meetings were often used for classroom work. The range of employments thus presented has positively enlarged the teacher's visions of the world of work, and the child and its endowments are better understood thru this concrete study of occupations and the types of employers presented as speakers. In all cases the educational foundations for success in this or that pursuit were definitely brought out, and the close of the last school year showed an unusual amount of educational advising, counsel as to the kind of high school or other training opportunities to choose in order to advance in this or that desired calling. A wider range of choice, a wider sympathy with a larger variety of employments, has resulted. There can be no question that the work thus far has directly enhanced the appreciation of what more education could offer.

Supplementing this work we began to put into booklet form our studies of the typical vocations open to Boston boys. Here is concrete and practical material for choosing a life-work. Here is a navigating chart for youth seeking a port. Again the educational foundations of efficiency and success are clearly analyzed and brought out. So far from directing the children's minds away from school to work, the very opposite is the result achieved and intended. We join here with school and employer in helping to lift the boy or girl from a drifter to a learner. These booklets cover a number of points of interest. The Boston superintendents are now planning to incorporate this material into the regular courses under a heading to be called "Contemporary Boston—Civic and Vocational."

Actual placement is not yet attempted because it will take some years for these principles underlying vocational guidance to find themselves in such common practice that there will be little danger of opening the doors to a new form of child exploitation. Some time will be required to produce an adequate vocational survey of the community, and some time will be required before we can develop enough trained vocational advisers who can be intrusted to do this work on full time. In Boston we believe that the time has come for specially preparing those who are to serve the schools as vocational advisers. Thru Harvard University we are laying foundations for a training course in this service. The Boston teachers as the result of two years of study and thought in this subject now recognize the need of a body of expert auxiliaries to do this particular work. Indeed they now openly and generally ask for the appointment of special counselors and the establishment of a vocational-guidance department. Note that this demand comes from within, from the rank and file, from the children's most devoted friends who want to co-operate and who realize the size of this task of counseling.

Three picked teachers from the group of counselors are detailed this year to give their time to the needed investigations preparatory to such a vocational-guidance department. One is planning a new organization of the employment-certificate department. The superintendent has assigned her to study the methods of granting working-papers. The thought is to do this work in a way to help the child who must go to work with advice, medical examination, and vocational information. This work will not stop here nor begin here. Back in the grades children who are likely to leave will be discovered and helped in every way to stay longer, or to continue their development if they do leave. The other two are investigating the careers of those who left in certain schools five years ago, and those now leaving and why.

Vocational guidance does not proclaim itself as a solution of all the serious problems confronting the child at work. But it has within its possibilities hitherto unused relationships between the employer and the school. The changes going on in schools are no more significant than are those in the field of employment.

How does the business man view this movement? More and more the public-minded employers are realizing that the high percentage of constant turn-over of employees, the incessant shifting and restlessness, are an economic waste for all concerned. While changes on the part of beginners often lead to slightly better pay and opportunities, in the long run the results do not indicate any substantial gain in the direction of permanent life work. Most of the drifters find themselves at the threshold of manhood at an *impasse*. To the industries which are learning the value of a permanent and progressive body of employees these continual replacements of employees count up in definite losses and inefficiency.

How about the dead-end or blind-alley occupations, which cannot provide in their operations for stimulus or development of any kind? Here we must stand squarely for the proposition that so far as law and public conscience can avail, no youth shall be permitted to suffer an arrest of growth because of industrial maladjustments. In these employments above all others, compulsory training opportunities must be provided during the only hours when a night school for the young should be in session—the daylight hours. In Massachusetts the State Board of Education is investigating the educational needs of working children between fourteen and seventeen in certain typical employments where a large number of young people are in work not particularly educative.

Whatever may be the final solution, whether thru compulsory continuation schools, drastic reduction of working hours, improvement of work conditions, social scrutiny of employment, and the exclusion from all industry of the fourteen to sixteen-year-olds who are admittedly unprofitable to the employer in legitimate callings and unprofitable to the community in parasitical callings, we must hold fast to the proposition that no occupation shall "graft" on the service-resources of our youth.

We go to great pain and sacrifice to fit our boys and girls for the job; we want the job to be fit for the boy and girl. We want to give the world of work the best trained, best advised, and best prepared corps of workers we can turn out; we ask that this investment and this equipment shall be not ruined, even if not enhanced.

We stand with the employer in a demand upon the individual for efficiency; let it be social as well as individual. The employer will ask more and more of the school; the school will ask more and more of the employer. School life and working life must co-operate to make of the student an efficient producer, to make of the efficient producer a responsible consumer and a serviceable citizen.

THE SCHOOLHOUSE AS THE CIVIC AND SOCIAL CENTER OF THE COMMUNITY

EDWARD J. WARD, UNIVERSITY OF WISCONSIN, MADISON, WIS.

"This is going to make the neighborhood feel like home in spite of telephones, newspapers, trolley cars, and all the modern improvements."

He was a banker who spoke and the occasion was the opening of a schoolhouse as a social center in a middle-western city.

"When I was a young man," he went on, "back in Licking County, Ohio, folks used to meet like this in the old drab, weatherboard schoolhouse. We called it the 'Literary'; in some places they called it the 'Lyceum' and in some it was just 'schoolhouse meetings.' The old double seats weren't any too comfortable; the light from the kerosene lamps, with their tin reflectors, wasn't any too good, but there was a human spirit in those gatherings, a man-to-man frankness and democracy that *made America mean something* to us young fellows. And there was a spirit of neighborhood there—not only in the sociables, the spell-downs, and singing school, but in the meetings where folks just listened to speakers, and talked. Getting together about things we had in common, whether it was what kind of a bridge we should have across the creek, or the tariff, we felt a first-hand responsibility for being citizens.

"I came away to the city. I got into the scramble. I've been at it as hard as anybody, and I've succeeded fairly well. But all the time there has been something missing. I know a lot of fine people, but I don't know my neighbors. I obey the laws and vote at election time, but somehow I don't get the *feel* of being a citizen. The fact is, I've lived here twenty years and it has never felt like home. But tonight when we're getting together, not as a party nor a sect, nor as a particular social set, but just as folks, as citizens, as neighbors, in this building which embodies the greatest of our common interests, that old feeling comes back, and as we go on with this —I tell you—even the city is going to feel like home."

Unlike most of the great significant movements in modern days, the movement to make the schoolhouse the civic and social center of the community appeals most strongly to the older, more conservative American.

The statesman, recognizing the fundamental importance of making the schoolhouse the citizens' common-council chamber, the working-center of an alert and self-informing common citizenship organization, welcomes this movement by as much as he recognizes the truth of Washington's words: "In proportion as the structure of government gives force to public opinion, it is essential that public opinion should be enlightened." And Justice of the Supreme Court Charles E. Hughes says, "I am more interested in what you are doing and what it stands for than in anything else in the world. You are buttressing the foundations of democracy."

The religious teacher—the priest, the minister—grasping the vital relationship between the leisure activities and the moral life of the community, welcomes the movement to make of the school building a common center of wholesome recreation. And we find not only that religious associations officially indorse the opening of the school buildings for use in the evening, but in many communities the chief promoters of social center development are the clergymen. For instance, in the little town of Stanley, Wis., the use of the high-school building as a "Peoples' Club House" came as the result of the united leadership of the Lutheran pastor, the Roman Catholic priest, and the Presbyterian minister. The Rev. Richard H. Edwards says, "It is unthinkable that the churches should oppose the social center movement."

The artist, recognizing that the worthy expression of the American soul in forms of beauty can come only with the cultivation and expression of music and the drama in an atmosphere democratic and free from the merely commercial motive, sees the vision of the use of the common schoolhouse as a democratic center of artistic culture and expression for the whole people. And Forbes Robertson says, "This is a program worthy of America."

School superintendents, principals, and teachers recognize that this movement to make the schoolhouse the comprehensive common center of the community means improved architecture, better equipment, more vital interest, and increased support for the school in its present service. The National Education Association has unanimously indorsed this movement; and in a hundred communities school principals and teachers are lending their service in promoting community gatherings of one kind or another which look toward the full community use of the schoolhouse.

But not even the youth, for whom the social center means gymnasium, games, and club opportunities which otherwise he might not have, welcomes the social center with more keen appreciation and zest than do the older men and women in the average community, for to them it is not only an advance, it is also a restoration.

Two generations ago, in the average community in the Middle West, and quite generally thruout the country, the schoolhouse began to be used, not only as a center for the education of the children during the day, but also in the evening as a center of democracy, a center of recreation, a center of neighborhood.

Histories have to be rewritten continually as our viewpoint shifts from that which regards only military exploits as important, to that which emphasizes constitutional changes, and then to that which looks for industrial developments, and finally to that which gives full recognition to the social life of the past.

When an American history shall be written from this more intimate point of view, it will be recognized that nothing in our national life has done so much to foster the American spirit of democracy, of spontaneous community feeling and sense of solidarity as this free association of citizens upon the common ground of civic interest, of recreation, and of neighborhood in the schoolhouse in the early days.

Only in a time of social strife and strain can we fully value the common ties of civic unity and friendliness. It was at the verge of the Civil War that Lincoln used these words:

> We are not enemies but friends. We must not be enemies. The mystic chords of memory stretching from every battle-field and patriot grave to every living heart and hearthstone all over this broad land, will yet swell the chorus of the union when again touched, as surely they will be, by the better angels of our nature.

In those words Lincoln recognized, as the strongest force that made for unity, the memory of how the fathers united in the common cause of the nation's independence. If in the face of the straining social and economic problems of our time, of the divisive, separating tendencies, we take account of the uniting memories of democracy and good-will, there is none so powerful, so characteristically American, so all-inclusively friendly as this common tradition of how we used to get together in the schoolhouse evenings for spell-downs and singing schools, and for first-hand discussion of common problems. In this memory today is most vividly expressed

> the true democracy that batters down the walls that separate us from each other, the walls of caste distinction and prejudice, and hatred and religious contempt.

In this common tradition is brought to us

the proof that we are all of one blood, one bounden duty, that all these antisocial prejudices are as shameful as illiteracy and that they will disappear as soon as ever we shall come to know each other well.

The schoolhouse in the simple primitive community began to be the focal center of the common life. But as the community grew older, and especially as it grew more populous, there came in the wedge of division, of separation, of specialization.

Instead of assembling to talk about political questions as matters of common interest, we separated into mutually antagonistic partisan organizations. We gave up the use of the schoolhouse as a citizens' common-council chamber. We gave up the common ground of friendly man-to-man understanding in politics. We gave up the real headquarters of popular government in a democracy. And instead of meeting to reason about and understand politics, as "the science of government," the field of common interest, we have made that word synonymous with partisanship.

We separated also in the pursuit of pleasure and the use of leisure. We formed the specialized library and art gallery, the specialized dramatic center and music hall. Failing to develop our recreational life as a community expression, by expanding the use of the schoolhouse where it began, we gave over our recreation largely to commercialized exploitation and the wholesome play instinct became the prey of the saloon and the vice resort.

And with the civic cleavage and the recreational diversity, came the utter break-up of our community social organization and we went apart to satisfy our outreaching friendly instincts by various sorts of exclusive cliques and circumscribed brotherhoods and fellowships. Abandoning the use of the schoolhouse as a common social center, we lost the power to think in terms of the community, the very word society became restricted in its use, and we began to develop pride in the myopia of exclusiveness.

In other words, we yielded to the centrifugal force which flung us apart in the following of special party leaders, the pursuit of special recreational interests, the development of special association tastes, until these things which would have been the means of binding us together and unfolding our unity, had we kept them in co-ordination, have become means of our separation, our mutual exclusion and misunderstanding.

So, from being a common civic and social center, this community building became simply the education place of the children.

If instead of abandoning the civic, recreational, and social evening uses of the schoolhouse by adults and older youth, these uses had been promoted and developed and the use for the children had been given up, we would be wise to ask whether this common social machinery half used would be doing its full service, just as, having developed the children's part of this building's use, we are beginning to ask whether this half of a community institution is making good.

A few years ago, before the Connecticut State Teachers' Association, President Eliot said that compared with what was hoped would result from the establishment of the common school, this most important of all our institutions is a failure, and he gave a catalog of some ten of the common evils of our time, which the public school fails to right. These evils may be grouped under three heads: misgovernment in place of intelligent democratic efficiency, dissipation and idling in place of constructive use of leisure in recreation, cleavage and class feeling in place of social order and public spirit.

This is a tremendously serious charge, for the distinctive success or failure of America lies in our efficiency or failure in collective self-government, our waste or good use of free time, our capacity or failure to weld a harmonious whole out of the varied elements of our population and to produce a race of socially conscious men and women, the maxim of whose choices shall be the common good.

But before we lay the blame for failing to develop citizenship capacity, power for better use of leisure, and social consciousness upon the teaching of the children in the schools, it is well to see whether the public school as simply an education place for the child is not so limited in its essential nature that it cannot meet these needs.

The public school as an institution for the education of the child has, of course, its great service to perform, than which nothing can be more important, but granting all possible improvement in personality of the teacher, in equipment, and in method, the public school as an education center for the child does not and cannot meet these civic needs.

The public school as simply an education center for the child does not and cannot produce "good citizenship," for in its nature as such it is and must be a monarchy, a place of training in obedience. We may veil and soften the authority into the most careful fostering guidance, as Froebel did and as Madame Montessori does, but the authority must be there and the law of the school must be obedience. Now "good citizenship" is more than obedience. Good citizenship in a democracy is the consciousness of responsibility not only for obeying the government, but for participation in *being* the government.

It is only thru the use of the school building as a civic center, that is, thru its use as a citizens' council chamber, a legislative assembly place, and a final supreme court room, that this common institution can serve America's greatest need in the development of a positive consciousness of democracy. Years ago, John Stuart Mill said, speaking of such public association on a common ground:

> Where this School of Public Spirit does not exist scarcely any sense is entertained that private persons owe any duties to society except to obey and submit. There is no unselfish sentiment of identification with the public. Every thought and feeling, either of interest or of duty, is absorbed in the individual or in the family. The man never thinks of any

collective interest, of any objects to be purchased jointly with others, but only in competition with them, and in some measure at their expense. A neighbor not being an ally nor an associate, since he is never engaged in any common undertaking for joint benefit, is therefore only a rival.

This responsibility for the use of the schoolhouse for the development of civic capacity cannot be shouldered off upon the child. We shall not cease to regard the government as being located at Washington, at the state capitol, or at the city hall—we shall not get the democratic point of view and sense of responsibility except as we make the schoolhouse the headquarters of an organized citizenship where men frequently assemble to discuss together and with their public servants the problems of democracy.

Not long since, President Taft spoke before the "Ohio Society" in New York City against the proposed placing in the hands of the citizens of the power to recall the judiciary. No doubt President Taft would agree with Lincoln when he says: "Why not repose patient trust in the ultimate justice of the people? Is there any better, is there any equal hope?" But as President Taft said, the difficulty is that the people have (or rather use) "no machinery" other than the partisan irresponsible newspaper and the biased appeal of the orator, for determining how they shall act. The schoolhouse as a center of civic discussion offers such a "machinery" as is needed to develop intelligent public opinion. "It is no exaggeration to say," says Henry Campbell, "that in making the schoolhouse the forum of the people lies the chief hope of perpetuating the republic and perfecting its institutions." The legislature of Wisconsin has recognized this fundamental civic use of the schoolhouse as a center of democracy, as a right of so great importance, that the school boards are required to make provision for this use. And this great function of the schoolhouse as a foothold of democracy, a handhold upon government, a working-center of citizenship cannot be met by the school as an education place simply for the child.

Second only to the need of developing the citizens' capacity for intelligent government, in the great enterprise of America's making good, is the development of a strength-building recreational life, "the capacity to have fun without doing wrong."

Francis H. McLean, after a year's careful investigation of the community needs in many parts of America, placed as first in importance the need of wholesome recreation. Does the public school simply as the education center for the child tend powerfully toward the supplanting of vice and dissipation by constructive recreation and toward the free devotion of surplus energy to beautiful expression?

The public school as simply the education center for the child does not and cannot meet this need, because in its nature it is restrictive. The child in the school is not free to do wrong. The attendance is compulsory. There is little or no training in spontaneous play expression.

On the other hand, the opening of the school building as a center of entertainment to which one is free to come or not as he will, the fostering there of the individual's free self-realization in recreational activities, in musical and dramatic expression, does directly and powerfully meet this need.

In the city of Milwaukee, up to a few years ago, Schlitz Beer Garden on Vliet Street was a popular and much frequented resort. Today if you go there, and, entering the old beer hall, go up to the bar, put your foot on the rail, and ask for something, you will receive a book from the branch public library. Why the change? Simply because the city has begun to furnish music in the parks. Formerly when a man would take his family to hear good music, he went to the beer-garden. He paid the wet tax, not because he wanted the liquor, but because he wanted the music—and that was the price. When music was furnished free in the public park, he went there. The beer-garden ceased to be profitable and was sold at a low figure to the city.

The time of greatest need for recreation opportunities is the time of greatest leisure, the evening. When every schoolhouse is equipped with gymnasium and baths, with bowling alley and games, with music and other forms of entertainment for the evening, the property of the evening dissipation places will be "for sale cheap." And when, as in Richmond, Ind., the community provides the services of a musical director, and as has been begun in New York City, the services of a dramatic director, to develop in the school buildings the latent orchestral, choral, and dramatic resources of the communities, the level of leisure activities, the recreational taste, and the moral character of America will be raised.

There is a phase of this service of the schoolhouse as a recreation center which has a fundamental bearing upon the most vital problem of the future of the family in America. Here is possible the acquaintance, under wholesome environment, of the young men and women who will be the fathers and mothers of the next generation. Today there is for very many no such recreation place which is at once free, attractive, and wholesome.

This common need of elevating the recreational life of the community, the schoolhouse as a center only for the education of the child, does not and cannot meet.

And finally, does or can the public school, used simply as an education center for children, develop that social consciousness, that breadth of human sympathy, that sense of solidarity and power of collective action upon which all those who do not accept the doctrine of "the class struggle" base their hope of human progress?

The public school is a socially supported institution, and yet as a children's education place it is individualistic in the tendency of its training. The main lines of conscious influence, obligation, and responsibility do not run horizontally from child to child, but perpendicularly from the teacher to each child. This is necessarily the case. So long as children are under a teacher, and, of course, so long as children are children they must in school be under a teacher, the chief feelings of interest and loyalty will be directed upward toward the teacher, rather than outward as social feelings. Moreover, the whole development of child study is the consideration of the child as an individual, and the main tendency of its training is to develop the child's capacities and powers as an individual.

The individualistic training is vitally important, but it is also vitally important that there should be training in, or at least an opportunity for, the development of the community spirit, the social consciousness. The community building used only as an education place for the child is a paternal training-place. Used as a gathering-place for adults for self-education through discussion, recreation together, and acquaintance, it is a fraternal training-place. Both are necessary; each supplements the other, and neither can take the place of the other.

The possibilities in the development of the social consciousness and the power of united action, for whose unfoldment the use of the schoolhouse as a social center makes way, were suggested by Governor Wilson in these words:

> It seems to me that what is going to be produced by this movement—not all at once, by slow and tedious stages, no doubt, but nevertheless very certainly in the end—is, in the first place, a release of common forces now undiscovered, now somewhere banked up, now somewhere unavailable, the removal of barriers to the common understanding, the opening of mind to mind, the clarification of the air and the release in that clarified air of forces that can live in it, and just so certainly as you release those forces you make easier the fundamental problem of modern society, which is the problem of accommodating the various interests in modern society to one another.

The school as a center for the education of the child tends to unfold individual capacity; it does not and cannot awake the dormant social possibilities of a concerted life.

The movement to make the schoolhouse the civic and social center of the community, is, however, not by any means merely the result of the observation on the part of the educator, that the present service of the school is inadequate as a training-place for democracy, for better use of leisure, and for social consciousness; and the decision, following that observation, that the schoolhouse shall become the civic and social center. To be sure this is an important factor, and the welcoming of this movement by school men will help to hasten its realization. But the fact is that the movement to make the schoolhouse the focal center of the community has itself the character of the institution which it aims to develop. That is to say, the social center movement is a focalizing of many movements whose aim is the public welfare.

Men and women form local or national organizations to promote the public welfare along various lines. They work away at their special problems for a while. Then they make the discovery that, with communities as with individuals, that which is really beneficial is not what is done for one, but what one does for himself, and that the wider use of the schoolhouse offers the convenient, economical means whereby the community can secure for itself the improvements in which they are interested, or by this means the community can protect itself against the evils they are fighting. So the members of one of these organizations start to agitate for the opening of the schoolhouse, and when they do they usually find that other associations working on other lines of public service have made the same discovery.

The fact that eleven different organizations, of various sorts, united to secure the opening of the schoolhouses in Rochester, N.Y., is an illustration of this gathering of forces into a common movement. This is typical of this movement thruout the country. It is a focusing of the efforts of various organizations which aim to promote the public welfare.

For instance, in nearly every community there is a group of men in whom the spirit of revolt against corruption becomes aggressive. When evidences of "graft" appear the first impulse is to catch somebody and put him in jail, and for a time that seems the final remedy. After a while, however, the men who are engaged in this pursuit begin to dig down to find the cause of the condition, and Mr. A. Leo Weil, the prosecutor of the recent graft cases in Pittsburgh, sums up his study of the whole subject by saying that "the indictment of grafters is the indictment of the community." Then he points out the cause in the condition since we left the use of the schoolhouse as a center of civic expression. "With the *increase* of official business there has come to the individual a *decrease* in the opportunity to participate either by the expression of his will or of his opinion, notwithstanding the greater necessity for such expression." So in Buffalo, William Wright, who in that city and in the state legislature for years has fought the corrupting influences of special interests, turns to the schoolhouse for the remedy: "The men who have special interests get together to look out for their special interests. Only as the citizens get together and organize to look out for their interests will the public welfare be steadily protected."

Wherever "reform" movements reach the constructive stage, they tend to become factors in the movement to make the schoolhouse the civic and social center of the community, for their leaders recognize that this is the means of securing that civic health thru civic exercise which will fortify the body politic against disease. Judge Lindsey says: "We have been fighting the beast; you [social center promoters] will make the dirty animal impossible."

Not only the fighters against political evils, but those who are interested in various specific measures of improvement, are turning to the idea of the establishment of the use of the schoolhouse as a citizenship organization center and civic forum. Whether the improvement projected be the adoption of another form of government for the city, the approval of a city plan, the matter of a bond issue, or some other special measure, the men who seek to wake their communities to take some action of civic improvement are coming to recognize the benefit and the saving of energy that would come if there were the opportunity to present the proposed measure for discussion in established community civic forums; and these men combine their request with that of the "reformers" to open the schoolhouses.

The uniting of the religious and moral leaders of the community in urging the opening of the schoolhouses for clean evening recreation has been spoken of. In one city, during the past year, a leading clergyman said:

> Some time ago, when I began to recognize the need of a recreation place, especially for the young people, I thought of building a parish house in connection with my church. I then thought that it would be more economical to unite forces with others in the building of a Y.M.C.A. Today I see that the money that a Y.M.C.A. plant would cost would go very much farther and benefit a hundred fold more people if it were devoted to the equipment, supervision, and opening of the schoolhouses for physical training, club work, and entertainment.

The Playground and Recreation Association of America began with chief emphasis upon out-of-door recreation facilities, but it is now actively promoting the opening of the schoolhouses for wider use. Dr. Luther H. Gulick, the first president of that association, has showed his perception of the fundamental significance and need of the social center in these words:

> Only upon a basis of personal understanding and mutual confidence is efficient and coherent social action possible. This is the foundation of democracy. Communities must have, therefore, material and social machinery by which various classes shall come to know each other; some instrument that shall cross-section racial, financial, and social strata; something that shall go beneath these and touch fundamental human interests. . . . . The machinery most natural, as well as most available is the public-school system.

But not only do these and other organizations which are formed to promote general civic, moral, and recreational improvement unite in indorsing and advocating the opening of the schoolhouse as a community center. There is also the active indorsement of those who are engaged in various specific forms of public service. In nearly every city and town the public library stands ready to co-operate by making the schoolhouse a neighborhood branch library. This is now being done in Grand Rapids and other towns. The co-operation of the Richmond Art Association is back of the movement to make the schoolhouses of that city neighborhood art galleries. The movement to make the schoolhouse a community music center has back of it the interest of such men as Walter Damrosch. The National Board of Censorship of Motion Picture Films is promoting the idea of making the schoolhouse the neighborhood motion picture theater. In some cases organizations co-operate in maintaining special extensions of the use of schoolhouses. For instance, the Rochester Dental Society maintained the service of the first dental office to be opened in a schoolhouse in that city. Of course the societies formed to promote the public welfare in rural communities are practically all in agreement with the recommendation of the country life commission looking toward community center development in the country.

But the social center movement has its roots deeper than the recognition of its need on the part of students of public problems in America. It is the expression of the great fact that the tide has turned. The dominant force of this century is not centrifugal but centripetal. We have passed the time of social analysis and are entered upon the time of social synthesis. As Dr. Elmer E. Brown puts it: "The very forces that have been drawing us apart into groups and classes have been making us sick of artificial separations." Little Jack Horner is growing up, and he no longer regards it as praiseworthy to pull a plum from a pie while he occupies a seat in the corner. For fifty years we have devoted our best energy to the construction of a fabric of machinery by which things would work together for good. We are now turning to the development of machinery by which folks may work together, and think together, and enjoy together for good. And the social center movement is assuming the force of a practical American common-sense idea generally held.

There is not space to deal at length with the question of administration. The National Education Association included in its resolution indorsing the social center movement the statement that the administration should be kept in the hands of the constituted school authorities. Obviously, this points the necessity of the school board or trustees having a comprehension of the values in the use of the schoolhouse as a center of democracy, a center of recreation, a center of neighborhood, as well as an education center for children.

The cost to a city of having a school board which does not recognize it as a duty to allow and encourage the largest possible community use of the schoolhouses is illustrated by the experience of Chicago. Twenty years ago, the Chicago School Board refused requests to allow the schoolhouses to be used for evening club activities and recreation. The movement to make provision for community social and recreational needs was then turned to the building of special community buildings to meet these needs. Since that time, Chicago has spent nearly twenty million dollars in securing these duplicate plants. Had this amount of money been devoted to increasing the equipment and developing the use of the existing community buildings and grounds, instead of having seventeen of these recreation centers, the city of Chicago would have an adequate community center developed in each district in the city, and its school system would be a model.

But today the average school board would not take such a stand. On the contrary, there are many school boards whose members recognize the possibilities and benefits of social center development. For instance, Mr. Joseph Scott spoke not only as one of the counsel in the McNamara case, but also as president of the Los Angeles school board, when in an address before the Southern California Teachers' Association, just after the confession, he pointed out that the problem of industrial control is the problem of this century, than which there is only one greater; and this greater problem is, whether in the solution of the economic question we shall preserve our civic unity and our common-sense of justice and good-will, our fundamental human friendliness, and said he, the possibility for the right solution of this greater problem lies chiefly in the use of this community institution—the school.

It may be said that the responsibility for promoting social center development lies back of the school board, that this body as a rule has no funds for this extension. In view of the fact that the school board is, in most cases, free to make out its own budget, it has within its hands the power of correcting this lack, and as a rule is able to make a beginning with funds in hand.

The first step is, of course, the engagement of a man as an assistant to the superintendent, to take charge of this field of the wider use of the school plant. The average superintendent has his hands full with the regular work of the school. This office is that of a social engineer. The man who occupies this position should, in the first place, be familiar with the beginnings that have been made in social center development thruout the country. He should grasp, of course, the idea of the use of the schoolhouse as a center for community organization of citizens, for this organization is the democratic foundation of the social center. He should recognize that he and his assistants in the various neighborhoods are not teachers, but servants of these neighborhood civic clubs, aiding in the preparation of programs, the work of publicity, and otherwise serving the owners of the buildings. He should be familiar with the methods found successful in the use of the schoolhouse as a lecture center, as this has been developed in New York and other cities. He should know the experience of Los Angeles, Worcester, and the other towns which use the schoolhouses as polling-places. He should be familiar with the use of the schoolhouse as an art gallery and music center as it has begun in Richmond, Ind. He should know the use of the library as it is in Grand Rapids, and should grasp the possibility of making the librarian's desk the local employment office and information bureau as this was begun in Rochester. He should be familiar with the school museum system of St. Louis. He should know the methods of boys' and girls' club organization worked out, for instance, in New York. He should be familiar with the gymnasium equipment and methods of direction which have been found satisfactory in Cincinnati, and he should know the various methods in the recreational use of the schoolhouse as these have been developed in New York, Chicago, Columbus, and other cities.

But the man who is qualified for this position must recognize that the beginnings that have been made are only fragmentary and that the opportunity in this field is for constructive pioneering.

The training for this position should, of course, include an understanding of the technique of the school in its present use, so that there may be a correlation between the day and evening use of the community building.

He should, of course, also have a thoro practical grounding in sociology But while the work of a social engineer is like that of a mechanical engineer, or a civil engineer, in requiring technical knowledge for efficiency, unlike these, it chiefly demands qualities of personality.

Obviously, the first requirement of the head of a staff of social center secretaries, boys' and girls' club directors, gymnasium directors, librarians, musical and dramatic directors is the capacity for organization and selection.

Some materials are conductors of electric currents and some are non-conductors. Some men are conductors and some non-conductors of social currents. A social engineer is a human being serving other human beings as a "social missing link." He must not only be common in his sympathies and understanding, free from all pettiness and bias; he must also be a "conductor."

But above all he must have the consciousness, and be able to inspire in his fellow public servants in this work the idea of *social service*, not at all in the usual sense of these words, but in the frank recognition that he and they are the hired men and hired women of the people who pay their salaries.

And finally, he must have a grasp of the social center idea in its big significance, that deep significance which was suggested by the banker quoted at the beginning of this paper, in the words, "This is going to make the neighborhood seem like home."

For this is the fundamental significance of the social center movement.

The education of the child is a family function. The man and woman began to be human when they got together for the education of the child. It was thru their association together upon the common ground, and under the common roof of the child's education that they learned co-operation, mutual consideration, affection. It was thru their association together upon this common ground under the common roof, consecrated to the education of the child, that they learned to think in terms of each other's welfare, that they developed the home feeling within the little unit group of the family.

Now, out from the household have gone the industries and the arts, out into the street and shop and store. And out in that realm the rule is *caveat emptor* and suspicion, and selfishness. We have not learned to think in terms of the larger group. But out there in the public school is that claim-stake of our faith that the larger group of the neighborhood has in it the potential quality of a household. Out there is the education of the child. As we get together under that common roof, upon that common ground consecrated to the education of the child which made us human in the smaller group, we shall develop, thru association and acquaintance, the household sense of common interest, of mutual consideration within this larger group, which will make the neighborhood, even in the city, seem like home, not only to the old folks who remember how we used to do, but to all of us.

Only as the social center movement is organized and developed in a spirit true to the democracy, the freedom, the all-inclusive good-will and tradition of the "way we used to get together back home," will this development fulfill its promise and be worthy its place as the characteristic institution of America, an efficient means for fundamental human progress.

THE BOOKMAN IN HIS RELATION TO THE TEXTBOOK PROBLEM

FRANK A. FITZPATRICK, MANAGER, AMERICAN BOOK COMPANY,
BOSTON, MASS.

The textbook publisher in this country is of comparatively recent origin. He came into existence when schools began to demand that every pupil in the same class should use similar textbooks. Dealers in school furniture, heating, ventilating appliances, and school supplies developed as industries somewhat later. Seventy-five years ago in New England, outside of a few cities, schools were greatly hampered by their inability to require and procure uniform textbooks. As the West developed, settlers brought with them their old schoolbooks, and trouble and confusion resulted therefrom in the schools. The practice of giving an exchange price for old books was a concession on the part of publishers to aid the school authorities in getting out of the hands of pupils the diverse textbooks in the schools, which, remaining in the community, made classification impossible. The entire volume of the textbook business of every grade and description in the United States and its dependencies is under rather than over twelve million dollars per annum, divided among more than one hundred publishers. Briefly stated, the cost of textbooks of all kinds in any town or city never exceeds fifteen cents per capita of the population in such community.

Publishers advertise their new and forthcoming books in educational journals, in circulars, by mailing books free as samples to thoughtful and able teachers, that school authorities may know these books and ascertain for themselves the merits of the plans therein presented. When some publishers have sought to limit this advertising expense by cutting their number of donated sample copies, they have been so deluged with letters from teachers and school officials threatening them with loss of future business, that this expensive advertising practice still continues. Yet these agencies are feeble in comparison with personal presentation of the merits of a textbook by a skilled and tactful bookman.

A textbook first appears in the method of treatment of some excellent teacher in the schoolroom—friends, visitors see its merits and get in that way some of the ideas. The next step is to ask for all phases of the treatment, i.e., have the teacher write out a copy of his presentation. This finally becomes a serious task and the author works out his plan in detail and presents his manuscript to some publisher. It is criticized by editors, referred to other critics, its adaptability considered—and accepted. His manuscript may be rejected; neither editor nor readers may get the idea or thought of the author; because the author's ideas run counter to the views of those who read the manuscript; because the manuscript is believed to be so contrary to prevailing usage in the schools that the sales would be small. In the beginning, authors and founders of publishing houses were both printers and salesmen. When Professor Davies, of West Point, wrote his series of arithmetics he found a publisher in a young man, the founder of a great business, who took the risk of printing, and personally canvassed teachers and boards of education. As business increased, it became necessary to delegate the sale of textbooks to other hands than those who wrote, published, or printed them. To market a new idea, or article, salesmen of a special character are needed. They must be able to demonstrate the value of this article. To sell a new type of locomotive, its merits must first be explained to officials; its advantages must be pointed out to engineers who will have charge of it; future orders depend upon the way the new engine stands the tests made by the railway people.

The general introduction of music in the schools is largely owing to the personal efforts and demonstrations, years ago, of two bookmen, who, against great indifference on the part of school officials and more skepticism, in frequent contests with each other and others, proved that music could be taught just as other subjects. Similar services have been rendered to the schools in their time by many other bookmen. At present, any new idea affecting the schools, their well-being, such as results from better heating, lighting, ventilating, must be virtually taught and demonstrated to school officials and authorities by the representatives of such industries, much the same as other topics are taught in the schools and in the world. The commercial world thus becomes an important factor in bringing about better conditions. In a recent article Professor Duncan quotes a famous chemist, Professor Bernhard of Paris:

> Former discoveries of mine I gave to the world and they have practically died. The last one I have patented because only by making it an object to some commercial interest to make it, can it be brought to man's attention and the world benefited.

An article that anybody can make, a book not protected by copyright, is not likely to be made by anyone. Any publishers can publish the great debates between Lincoln and Douglas. The copyrights on numerous books of great literary value have long since expired, but if you want to purchase a copy, the only place that one can be found is probably in the stock of the dealer in second-hand books.

The bookman, in his first relation to the schools, exists, directly, to point out and exploit the aims and methods of the author of the textbook that he is trying to sell; indirectly, to help the schools thru betterment of methods of teaching. For these purposes he needs opportunity to lay his facts and points before teachers and superintendents; otherwise, it might be months and years before these busy people would discover what this author has to tell them. The cost of textbooks of all description does not exceed 3 per cent of the appropriation for running expenses of the schools. Yet to the pupils in the schools it may be a question of 50 per cent of their time and opportunities, to have this problem thoroly studied and solved, to the end that the tools used by them shall be of the best quality and latest pattern. Therefore, teachers and superintendents must and do take all the time that they can spare from their other duties to acquaint themselves with the contents, methods, and aims of textbooks.

The bookman, coming into contact with the schools at various points, is quick to find excellent teachers, teachers with inventive minds, and to encourage them to express their powers in the line of authorship. Thru the bookman a very large number of the best textbooks come to be written and published. He is, therefore, an important factor in the growth and maintenance of good teaching and the consequent uplift in the schools, even tho the immediate results of his work are not so visible as those resulting from the efforts of others. Another function of the bookman is to secure and insure a high quality of workmanship in the manufacture of textbooks. He is an important factor in this because he witnesses in the wear and tear of books in the schools shortcomings in binding and printing, and learns of defects in methods of treatment from the criticisms of teachers and patrons. These faults he is more anxious to correct than anyone else. This causes him to be alert at all times in the interest of his customers—the schools.

Bookmen are not interested particularly in any one system or plan of adopting textbooks. They are in favor, as a rule, of the existing plan in their respective fields. They cannot see, however, why teachers and superintendents with their interest in the well-being of the children in the schools can fail to oppose the form of state adoption; for under this plan the influence of the teacher, principal, or superintendent is practically destroyed. Where the town or city is the unit of adoption the trend is more and more to place the decision of textbook questions in the hands of teachers and their responsible superior officers. In my opinion, "Massachusetts is in advance of any other state in its solution of the problems involved in a representative government." The textbook law in Massachusetts, on the statute books over forty years, is as follows: "Changes may be made in the textbooks used in a town at any time, notice having been given at a previous meeting and two-thirds of the members of the Board voting in the affirmative"—simple, compact, progressively conservative, affording opportunity for changes, requiring careful consideration. Last year the legislature passed an act requiring the superintendent of schools to make his recommendation of textbooks to the Board of Education, as a prerequisite to action on the part of the Board of Education. The bookman always welcomes the trend of the question of selection of textbooks to the skilled teacher modified by the judgment of principals and superintendent. By that method he escapes the influence of the politician, of the relative of some board-member's wife, of the enthusiasm for a rival's wares because someone belongs to the same college fraternity, or went to the same preparatory school.

Strange as it may seem to some, publishers of textbooks and their employees, the bookmen, are leaders in the development of better methods and higher ideals in the conduct of business. Yet this paper would be incomplete without some discussion of the faults and misdemeanors of some few members of the profession. The bonus system—postdating of bills, extra discounts, cutting of prices when times are dull, etc.—is a common practice in many lines of trade. Banks are still soliciting depositors' accounts by promising interest on monthly balances. Dealers in pianos, automobiles, certain kinds of new machinery, continue the practice of paying commissions directly and indirectly for new business. Publishers of magazines offer premiums in various forms to new subscribers. It is an axiom in the business world that a business cannot be developed on any other basis than that of absolute and unswerving honesty. But there is always a small percentage of business men who are not built right actually always to do what they believe is right. A salesman knows that if he misrepresents an article, hides defects in it, exacts too high a price for it, overstocks his customer by an inordinately large order, that the doing of any one of these acts will react upon himself and work an injury to him and his future prospects. Yet some salesmen, who have not been consciously disciplined by experience, will still take a chance. Man's moral fiber has not yet been sufficiently strengthened in his struggle upward, always to withstand temptation. The ability to put aside an apparent immediate benefit, even when one's intellect tells him that in the long run such decision is right, is an attribute not universally possessed. Happily for most of us, life is not a tragedy but a comedy. The conflicts in the sphere of duty which constitute tragedy, in a comedy, are always modified by happenings which mediate these conflicts. It is like a bad dream which, enmeshing us in its horrible chain of circumstances, is suddenly ended by an awakening. We are told by the moralists that this course is right and that is wrong—why hesitate a moment over your decision? In actual life, however, such a clear proposition is seldom presented—usually there is always some wrong mixed in with the right and some right with the wrong—and one's decision in such cases is not so easy as the professional moralist would have us believe.

Now, the oftener a man is required to act, exercise his judgment and the number of different planes in which these actions lie, bear a relation to the number of errors he will make. As bookmen need to act on inferences oftener and on more fields than teachers or principals, they ought certainly to make more mistakes. When such error or mistake in judgment is committed by a bookman who has a quasi-public position in his world, it is likely to have much more publicity than similar shortcomings on the part of other business people. The author, the editor, sees his mistakes in black and white, but the errors of teachers, superintendents, managers of businesses, bookmen are not so definitely chronicled. Yet some bookmen have been guilty, in prosecuting their business, of errors, faulty judgments, and indiscretions. Teachers, principals, college professors, ministers too, have erred in our time to such an extent as to bring some few individuals within the meshes of the law. But you cannot successfully indict a whole people, nor a whole class, nor a whole profession because some individual member has erred. On the whole, bookmen, in their methods, their line of action, their life in and out of their business, challenge comparison with any other class of business men.

For this present purpose I assume that teachers may group our errors under four heads:

1. Discrimination in terms—giving to one place better rates than to another in order to secure business, some phase of the bonus system, etc.
2. Undue activity in the politics of the National Education Association and state teachers' associations.
3. Meddling in the affairs of the school—assisting teachers and superintendents to secure places; the use of political influence in or outside the schools.
4. Personal criticism of competitors for imagined business gain.

First. In over twenty-five years' experience in the business I have known and been informed directly and indirectly of not more than twelve instances of irregular practice on the part of bookmen. The motive in each case was intense personal feeling against some rival bookman and the desire to win at all hazards. Of course such actions are reprehensible and should be frowned on by everyone inside and outside the business. If this is true, it will be asked why does the publisher not promptly discharge the offending bookman and publicly disown the wrong act? For the same reason that in the family we do not publicly disown one of its members; for the same reason that a superintendent of schools does not recommend the discharge of a teacher who does some stupid thing or gets tangled in the maze of questionable action. Again, the spirit of the age no longer permits the penalizing of employees for errors or faults which can be eliminated thru wise counsel of superiors.

Second. Undue activity at meetings of state teachers' associations or at the National Education Association. If bookmen are members of said association, or associations, they have as much right as other members to express their convictions on matters relative to the policy of the association. As a matter of fact, bookmen rarely take any interest in either the program or the politics of such associations. They never do unless solicited by superintendents or teachers. In such cases the votes and support of bookmen are as various and diverse as the votes and action of any other class of voters. Publishers themselves have no interest in such matters.

Third. Meddling in local politics or use of political influence. In communities where such influences control school affairs, such as the election of a superintendent, the appointment of teachers, the selection of janitors, the choosing of school sites, the erection of buildings, etc., it can hardly be denied that they may also affect the adoption of textbooks. Here are conditions into which the bookman is thrown, and for which he is in no way responsible. A man of ability and character, who has worked long in a limited field, has acquired an extensive acquaintance; he comes in personal contact with leading people in the various parts of his territory. He must be politic and tactful, as well as energetic in the prosecution of his business. Under such conditions he may be tempted to use the local political forces; the high-grade bookman never does, because of the ultimate danger to his business from such an alliance: because such aid becomes a burden on him and his business. No one regrets more than do the publishers and the bookmen interference in educational matters thru politics or politicians. But I know of no ground which justifies any general accusation against the bookmen of resorting to politics in the prosecution of their business. Probably such charges in nearly all instances originate in the attempt of an unsuccessful rival to account for his failure. Superintendents in search of competent teachers for an immediate vacancy seek the advice of bookmen at times because of their large acquaintance. If a bookman commends some worthy teacher, in response, isn't it ungenerous to intimate that he has other motives than serving the schools and a worthy teacher? Personally nothing gives me greater pleasure than to serve an excellent teacher or superintendent, because I feel that by so doing I am helping the schools—no one ever suggested to me that I had an ulterior business motive in such action. In my own case I am as careful in recommending teachers as I was when superintendent.

Fourth. Personal criticism of competitors for imagined business gain. The evil of "knocking" one another, in the slang of the day, is more or less prevalent in every line where there is intense competition. It occurs in the professions and thruout the commercial world. Echoes of such misrepresentation are heard from small people in college faculties. The business of publishing school books and selling them ought to be above and beyond this sort of thing. It is with great regret that I admit that this is not always the case. We are too prone to gossip and to criticize others, to the loss of our own dignity and the consequent impairment of our business. This practice, however, brings its own punishment. The lawyer who indulges in personal insinuations or reflections upon his opponent fails to rise very high in his profession. The doctor of medicine who is prone to point out the weaknesses or incapacity of his rivals loses caste. The practice comes from a low view of business ethics by the publisher, and from a futile tendency to magnify himself, which is sometimes a by-product of acute business rivalry. There can be no question that such habit is very objectionable, contrary to sound business principles, and should be frowned upon by all right-thinking people. Bookmen are, in effect, the attorneys of their respective houses; though cordial in their treatment of each other, when not engaged in contests, the intense personal antagonism between rival bookmen in heated and long-continued rivalries sometimes presents a demoralizing picture when viewed by a spectator who is not conversant with conditions. Rival real estate agents buying a particularly coveted property, newspaper reporters on track of an important news item, all men engaged in a fiercely competitive business go thru similar experiences. That the large majority of bookmen waging war against each other, living their lives in a small territory, nearly always in the limelight, can carry on their business efficiently and successfully and continue to receive the respect, the confidence, the friendship of practically every high-class man or woman with whom they come in contact in the schools, is a high tribute to the integrity, honor, and character of the profession.

When suitable opportunity to meet teachers and superintendents is given bookmen, only good can come from their visits. It is a maxim among bookmen that the busiest, ablest, and most prominent school officials and teachers are always the easiest to see. It is so rare when a bookman is denied an interview or prevented from prosecuting his missionary work that such occasions are a negligible quantity. An insistent, ill-mannered individual may, it is true, place himself outside the pale of even the great courtesy of the school world. Of course there are some narrow-minded, self-centered, all-knowing school officials who look upon the bookman as an unnecessary evil. Such men are rare; such attitude being reflected in their school activities elsewhere usually brings about a proper point of view. Trade, commerce, and science are interwoven together. Nothing is more anomalous, illogical, and unjust than antagonism between publishers, bookmen, and teachers. There should be complete sympathy and understanding between them. The bookman should express this policy in his actions at all times. Courteous, respectful but not apologetic, anxious to perform his principal duty as salesman, reasonably jealous of the ethics and responsibilities of his profession, but conscious that he is a factor in the cause of education.

To my mind, therefore, the bookman belongs properly in the system of education. He has a necessary function to perform. He will perform that function until other parts of the system develop so that the work performed by him can be better performed by them. Then, in accordance with the law of progress, he will pass away. Until that time it is to be hoped that he will live his life with the agencies for good in the schools and do his part toward reducing the number of his shortcomings, that thereby the efficiency and well-being of the schools may be increased.

THE EFFECT ON EDUCATION AND MORALS OF THE MOVING-PICTURE SHOWS

JOSEPH R. FULK, SUPERINTENDENT OF SCHOOLS, SEWARD, NEBR.

The moving picture has developed a form of public entertainment that has within the last few years spread itself over the entire civilized world. It seems that at last a universal means of communication has sprung into popular use everywhere.

The still picture has in all times exerted great influence with cultured and literate humanity. The magic lantern and its modifications enlarged very much the influence of the still picture, but language, written or spoken, was required to give to it anything like complete meaning. The moving or living picture is universal. It carries much meaning without language. Interpretation of action is an instinctive tendency.

This paper is part of a general study of the moving-picture show. Altho the topic limits the discussion to the effect of these shows on education and morals, some of the facts concerning the development, financial aspects, and control of the business are given to point out the magnitude of the new problem.

In their report for the year ending December 31, 1911, the Bureau of Moving Pictures of the City of Chicago gives the following figures:

Total number of films approved	3,255
Total length of films approved	[illegible],604,000 ft.
Total number of 5c and 10c theaters that exhibit moving pictures	400

Here are five hundred miles of original films released in one city in one year. During the same period the censors of the bureau rejected thirteen miles of films.

At present there are at least thirteen thousand moving-picture theaters in the United States. The increase is about one thousand annually. Conservative authorities place the daily attendance at five million. The attendance at the fourteen hundred regular theaters is about seven hundred and fifty thousand a day.

The film-manufacturing business has grown to enormous proportions. The great film companies employ studio "stock" players, and send groups of actors to all parts of the world to secure films with natural and historical settings. Films are made depicting life, industries, and scenery in many parts of the earth. The business has its trade journals, film bulletins, magazines, and state and national exhibitors' associations. Within the last year several schools have been opened for the purpose of teaching how to write scenarios or motion-picture plots.

These facts indicate that this new form of public entertainment is neither a fleeting fad nor a mental epidemic, but is a sociological force that must be reckoned with.

There is great truth in this assertion of Maeterlinck: "It is the way in which our hours of freedom are spent that determines, as much as war or as labor, the moral worth of a nation." The American people spend about one-fourth as much time in moving-picture shows as is spent in the public schools by children from fifteen to eighteen years of age. Authorities estimate that at least 25 per cent of those who attend are children. A careful investigation of the attendance in thirty-six towns and cities of Nebraska shows that 35 per cent of those attending are children under fifteen years of age. Children and adults of all classes sit side by side in the dim light of the motion-picture theater. The public school and the moving-picture show seem to be the only truly democratic institutions in the United States.

The control of the output of films is by far the greatest factor in the motion-picture problem. The Board of Censorship of New York City was formed in 1909, and was recognized by the film manufacturers as national in 1910. The report of the National Board issued in May, 1911, asserts that more than 99 per cent of all pictures publicly exhibited in the United States are censored by the board, and that the board's verdict is carried out with approximate completeness in all parts of the country. Reports from various cities testify that the board has done much to place cleaner and better films on the market. The board has also aided in developing the educational possibilities of the motion picture. However, comparatively few educational films are produced. The 630 films released by the "Licensed" and "Independent" manufacturers during November and December, 1911, are listed in "Motography," a magazine whose purpose is exploiting the motion picture, as follows: dramas, 86 per cent; scenic, 6¾ per cent; current events, 2¼ per cent; educational, 5 per cent.

"Motography" for January, 1912, in reviewing the year 1911, says:

> The year has been marked by a general increase in the output of films, most of the licensed, and many of the independent, makers adding one or two reels to the weekly product. It is to be regretted, however, that a large portion of the new product has not been devoted to scientific, educational, and travel subjects.

Some of the film manufacturers have educational departments. In reply to an inquiry one of the large companies answered as follows:

> We have in course of preparation a Moving Picture Library of America, which will embrace trips treated in a comprehensive manner, covering all the states, and showing the principal attractions; points of interest in cities, and along railroads; rural and city developments; views of the largest industrial institutions with data pertaining thereto; historical scenes and topography of each state. It will be possible for a school to obtain a single film of one state or films of all the states.

In his catalog which he calls "An Educational System by Visualization," George Kleine of Chicago lists over one thousand films. This he claims includes all available films on educational topics. Many in this list, however, are very loosely called educational.

The Edison company will soon put on the market a moving-picture machine designed especially for school and home use. This machine, which is to sell for about fifty dollars, will use a special film costing about twelve dollars. This is about one-tenth of the cost of the ordinary trade film. These special films will be rented to schools at a reasonable rate.

A few schools, churches, and other organizations are now using the motion picture as an educational and moral help. These uses, however, are comparatively rare. At present, it is the motion picture in the public show that is yielding the influence.

The popular motion picture is essentially dramatic. In some respects it is a modern development of the pantomime. As a rule film manufacturers use educational material only when it contains a dramatic story in some form. The drama in its various forms has always played an important part in civilization. The moving-picture show has done for the drama what printing did for literature. It has brought a form of dramatic art into the daily life of the people. The photoplay holds and affects an audience in very much the same manner and degree as the regular drama. It may have fifty or one hundred scenes if needed; may follow a character from place to place, and may present scenes and circumstances that are not possible on the stage. But it has its limitations. When action is subordinated to an element of character the film is inadequate. What people are may be suggested only by what they do. The appeal is thru the eye, and is chiefly emotional. This omission of language and of the direct intellectual appeal weakens the motion-picture drama, and renders it less moral, because it stirs primitive passions and does not arouse highest mental activity.

Anyone who has observed moving-picture audiences when educational films have been thrown on the screen must be convinced that people do not go to these shows to be instructed. It is the dramatic short-story film that appeals to them. The films that give the thrills of the "yellow back" novel without effort or exertion are most popular. Indians, cowboys, domestic troubles, daring deeds, elopements, the love story, these are the common popular themes. There is much display of the sentimental. Many of the situations and experiences of life that are more or less sacred or private are shown again and again to audiences of both sexes and of all ages. The moving-picture show does not recognize the child and the adolescent. Special shows for children would remove many of the objectionable features. At present the question is not, "What shall my son or daughter read?" but, "What moving pictures shall my son or daughter *see?*" The sensational and emotional novel is *seen* these days, not read.

This constant playing upon the emotions of the child and adolescent tends to overexcite, and to dull the finer feelings, and to prevent the normal development of the emotional life. The overexcitement creates an ever-increasing desire for something that stirs and thrills. Whatever holds attention determines action. This growing desire for emotional excitement is apt to lead children, and adolescents especially, away from right ideals and morality. Here lies the greatest moral danger of the motion-picture drama. The possibilities for evil due to the dim light of most of the moving-picture theaters add much to this danger.

The direct educational influence of the moving pictures in the public theaters is very difficult to measure. No one doubts that under proper supervision the motion picture can be made a valuable help in formal instruction. Certain phases of many school branches, such as historical events, industries, transportation, and customs of peoples, may be taught more effectively with their aid. But it seems to me that the educational value and possibilities of the motion picture have been unduly emphasized.

Attention to moving things is instinctive, and is not apt to be accompanied by real mental activity. If the moving objects are constantly changing in form and position there is continuous change of ideas. The mind cannot rest on any object of thought. The "stream of consciousness" becomes a torrent, in which things may be recognized, but not accounted for nor reasoned about. The film of the moving-picture show moves very rapidly. There is very little given in the way of explanation. The mind is hurried from one thing to another until the picture becomes little more than a fantasy or day-dream, unless it has a strong emotional appeal. If there is *impression*, there is no chance for *expression*. Posed educational films often misrepresent, and some films advertised as taken on the spot are evidently posed. All frequenters of moving-picture shows are acquainted with the New England buildings and background of the cowboy and western Indian films, and many have seen a lion hunt in Africa or a jungle scene posed in a film plant in Paris, New York, or Chicago. Travel and geographical films give about the same conception of a region as is obtained by viewing it from a railway train.

The headliners of the newspapers interpret the facts for the busy or mentally indolent readers. The cartoonists do much to mold public opinion. In London there are three daily papers which contain practically nothing but news pictures with short explanations. *The Animated Gazette* is a London film organization that furnishes a daily service of moving pictures of the news to a circuit of theaters having audiences of two million daily. Weekly current-event films are now used by many of the moving-picture shows of this country.

All of these organizations and forces tend to weaken thought power by furnishing to the people ready-made interpretations and conclusions. The same influence is being exerted in the field of literature by the photoplays based upon standard literary productions. The standardization of the interpretation of a poem like "Enoch Arden" robs the poem of its chief value, and takes from those who have not read it the joy of the reading. Such a poem cannot be seen except in the imagination of the reader. The usual crudeness of the acting and the inadequacy of expression make the photoplay of such a poem a serious obstacle to real interpretation and appreciation.

It seems to me that under the most favorable circumstances the public motion-picture theater has very little educational value, and that these shows as now managed are often detrimental to education.

My investigation has led me to believe that on the whole the motion-picture shows are less harmful to education and morals in the large cities than in the small cities and towns.

This conclusion is based to a great extent upon an investigation carried on in Nebraska, and also on my own observation of the shows themselves. I sent a questionnaire on the motion-picture show to the superintendent or principal of the public schools of every city or town in Nebraska having a population of seven hundred or more. Reports are tabulated from 68 towns. Of the towns reporting, 20 have a population of less than one thousand each; 27 between one and two thousand each; and 11 between two and three thousand. The list includes one city with a population of ten thousand, and five between five and ten thousand each.

There are 95 moving-picture shows in operation in these 68 Nebraska towns. The average attendance in the 36 towns reporting that item is 40,000 per week. Thirty-five per cent of those attending are children under fifteen years of age. The previous business of the managers of 54 shows was reported. Among these, seventeen had been in the merchandise business; six loafers or no business; six farmers; five showmen; three billiards and pool; two barbers; two editors; two students. Eleven other callings were represented. Few especially fitted men were in charge of shows. The business is strictly commercialized.

Of the 64 towns answering the question: "Are shows open on Sundays?" 57 reported "No"; 7 "Yes." Sixty-one out of 65 reported no local control of pictures shown.

"Are there any local restrictions or ordinances regarding the attendance of children?" was answered in the negative by each of the 64 towns reporting. One town reported a movement to pass an ordinance refusing admission to children, after the first evening show, unless accompanied by parent or guardian.

Forty-one towns reported no local opposition to the shows; 11 some or very slight opposition; 12 organized opposition. The organized opposition was by churches, good-government clubs, and public schools.

In 40 towns all classes of people patronize the shows; 10 report attendance chiefly young people and laborers; 5 name the rowdy element as prominent.

Thirty-seven schools reported that the shows were harmful to school work; 6 helpful or not detrimental. The commonest causes of harm given were: "Neglect of home study"; "diffused attention and dullness"; "wrong ideas of literature, geography, and history"; "frivolity and desire for cheap entertainment"; "general tendency toward the coarse and low, the rude and disrespectful." The only helpful influence named was, "Creates interest in geography and history."

In answer to the question, "What is your opinion of the influence of these shows upon school children as regards character formation?" 38 replied "bad, detrimental, harmful, or no good," 10, "good, no bad effects," or "very little influence." Some of the causes of evil influences were: "Numerous love scenes foster too much familiarity among boys and girls"; "desire for excitement"; "at shows children mingle with all classes, hear indecent jokes, etc."; "take children away from home"; "the music never elevates"; "wrong impressions of life created"; "lessens capacity for earnest, persistent work"; "cultivates habits of careless spending"; "many pictures suggest evil to boys and girls." The good influences were not named.

Forty-seven reported the shows harmful to the physical welfare of school children; 8 no injurious physical effects noticed. "Injury to eyes," "bad ventilation," and "loss of sleep" were most often given as physical harm.

Thirty-eight reported that they considered the shows more harmful than beneficial to the community; 13 more beneficial. The chief harmful causes given were: "Deprave public taste"; "trivial waste of time"; "appeals to sensational side of life, and ruins better class of public entertainment"; "causes children to want to be entertained"; "engenders idleness." Some of the benefits named were: "Wholesome amusement at low cost"; "much better than ordinary cheap shows"; "keeps young men from pool halls"; "comparatively harmless for a class that would spend money for dance or drink"; "supply considerable information."

In a few cases superintendents showed very little interest in the subject, and their replies indicated very slight knowledge of social conditions in their communities.

My general study of the motion-picture problem and the special study of conditions in Nebraska seem to justify these conclusions:

1. The moving-picture show has come to stay, and will increase in numbers and influence.

2. The character of the films shown and the general influence of the shows have improved much in the last three years.

3. There are important possibilities in the educational film, but the public motion-picture theater has very little, if any, educational value. The people want to be thrilled and amused, not instructed.

4. The moving-picture show yields a tremendous moral influence, that is not generally understood or considered. At present this influence is decidedly detrimental.

5. At present the public motion-picture theater is doing more harm than good, especially in the smaller towns.

THE STANDARDIZATION OF JANITOR SERVICE

G. M. WILSON, SUPERINTENDENT OF SCHOOLS, CONNERSVILLE, IND.

The physical basis of our school work is in charge of the janitor. We look to him for proper temperature, proper ventilation, proper humidity, and proper cleanliness. These matters are related very directly, not only to the health and happiness of the child, but to his progress in school work as well.

Dr. Putnam says:

> Methods of precision are as practicable and as necessary for caretakers of a school as for nurses in a hospital; their routine practice is entirely possible with reasonable instructions.

Janitor service being physical and manual would seem to lend itself readily to standardization. But my investigations show a general absence of standards and a resulting inefficiency and neglect. This is wrong, for compulsory education means compulsory contagion and disease unless physical conditions are kept right. No good homemaker has the dirty floors and foul air with which we shut up children and teachers.

The desire to improve the janitor service in my own system led me two years ago, under the inspiration of Ex-Commissioner Brown, to attempt a study of janitor service. It became evident early in the study that there was little agreement as to definite standards. The facts gathered with reference to *cleaning* will illustrate the situation. Out of 40 manuals of rules and regulations examined, 24 made any reference to the duties of janitors. With a possible mention of and agreement on 288 points in connection with scrubbing, sweeping, dusting, and other simple points in cleaning, there was an actual mention of 58 points and a practical agreement on 13. Two of the 40 manuals indicated how the scrubbing was to be done. Two indicated how the woodwork was to be cleaned. Three indicated how the walls were to be cleaned, but the practice even among the three varied from cleaning the walls once in two months to once a year. Six of the 40 manuals indicated how often the windows were to be washed, but even among the six mentioning the point the frequency varied from one month to three months. Cities whose manuals of rules and regulations were examined were scattered thruout the following states: New York, New Jersey, Pennsylvania, Maryland, Ohio, Indiana, Illinois, Minnesota, Nebraska, Iowa, Montana, California, Texas, Louisiana, Georgia, and Kentucky. The cities are fairly representative of the country, but even among cities in close proximity there is no more likelihood of agreement than among these widely scattered cities. The following illustrative table (p. 139) shows the distribution on a few of the facts considered.

The study of rules and regulations was followed by sending out a questionnaire in July, 1910, in which the chief points covered were the following: How are the floors dressed? How often in halls, in rooms? Are floors scrubbed or mopped, and how often in halls, in rooms, and in toilets? How is the sweeping done—with broom, with brush, with dust-down? How often is the sweeping done? And in like manner details as to cleaning the woodwork, dusting, washing windows, and caring for the blackboards were called for. Not all of the returns from this questionnaire were summarized, but a number were selected at random, which from all appearances were fairly representative. The cities selected were distributed thruout the following states: New York, Ohio, Indiana, Iowa, Kansas, Florida, and Illinois. In 17 cities selected at random, with the possible mention of and agreement on 476 points, there was an actual mention of 274 points and a practical agreement on 155 points, which is 56 per cent of the points mentioned or 32 per cent of the total points. The 32 per cent of agreement on total points is the significant figure, as omission in the questionnaire means the absence of any definite standard. The word "practical" in this study was inserted in order to get agreement where there was very little evidence of agreement. For instance, woodwork cleaned from two to five times a year was considered as agreement. The real agreement is in having no definite standard. This is further illustrated by some of the details. Woodwork was cleaned variously from daily to once a year. The baseboards were dusted in some places daily, in other places yearly. The windows were washed in a few places weekly and other places less frequently to twice a year. The illustrative table (p. 140) shows the distribution on a few points studied in the questionnaire.

	Floors—How Dressed	How Often	How Scrubbed	How Often Rooms	How Often Toilets	How Often Swept	How Cleaned Woodwork	How Often	Cleaned Walls	Dusting	Often Cleaned Windows
Number mentioned out of 40	0	0	2	10	6	9	2	9	3	11	6
Largest practical agreement	..	..	2	6	4	8	2	3	2	9	2
Range of practice	..	..	"Mop"	Monthly to twice a year	Daily to yearly	Daily to twice a week	"Wash"	Monthly to twice a year	Two months to yearly	Daily to twice a week	1 month to 3 months

It seems reasonable to conclude from the study of rules and regulations and from the returns based upon the questionnaire that there are no well-established standards in the matter of schoolroom cleaning. The large number not reporting or reporting very indefinitely is stronger evidence of the absence of standards than the lack of agreement among those reporting. The two lines of investigation point to the same conclusion. Variations may be due to conditions, but under any conditions there should be a standard. Some of the sources of error in the foregoing investigations are: (1) The difficulty of getting at actual practice thru a manual of rules and regulations. (2) The desire of superintendents to make a good showing in a questionnaire, especially when in doubt as to facts. (3) The difficulty of comparing situations that may vary as to important factors.

About two years ago Dr. Ayres studied a few of the facts with reference to schoolroom cleaning in 1,038 cities scattered thruout the United States. In his fine optimistic way Dr. Ayres notes the tendency toward better sanitary conditions and methods as applied to cleaning. Yet the other side of the situation shows that there were 395, or nearly 40 per cent, of the 1,038 cities where moist cloths were not used for dusting purposes. There were 144 cities, or over 10 per cent, not using dust-absorbing compounds for sweeping. The median frequency of the washing of schoolroom floors was 3½ months, the variation being from one day to never (which doubtless means eternity). The median frequency of the washing of windows among the 1,038 cities was four months, the variation being from once a week to once a year, seven again reporting never. In order to test out to an extent the statement made by Dr. Ayres that "these most encouraging signs of progress with respect to the cleansing of schoolrooms indicate that the day is not far distant when our schools shall be as clean as hospitals"; in order to learn to what extent we were approximating these conditions, I secured from Dr. Ayres, under promise of strict secrecy, the names of 50 cities where dust-absorbing compounds were not used in sweeping, and the names of 50 cities where moist cloths were not used in dusting. To these 100 cities letters were sent including a self-addressed postal, ready for reply after inserting the word "yes" or "no." This reduced the effort on the part of those responding to a minimum and insured a large measure of accuracy in the returns. The returns indicate that the optimism of Dr. Ayres is not without some foundation. Twenty per cent of those responding have in the last two years adopted the plan of using dust-absorbing compounds in sweeping, 80 per cent are persisting in their former insanitary methods. Thirty-six per cent of those responding indicate that they are now using moist cloths in dusting, while only 64 per cent persist in the use of former methods. Not

	Floors—How Dressed	Often Rooms	How Cleaned	Often Halls	Often Toilets	Often Swept	How Cleaned	How Often	Often Walls	How Dusting	Windows Often Washed
Number reporting out of 17....	11	8	10	11	10	15	14	14	12	14	13
Largest practical agreement......	7	2	6	4	4	14	11	5	3	8	10
Range of difference (underscore prevalent).....	Oil	1 month to 5 years	Mop	Daily to yearly (monthly)	Daily to yearly (monthly)	Daily	Wash	Monthly to yearly (3 times a year)	2 to 5 years	Damp cloth	Weekly to 4 times a year

all responded. It is possible that those who could respond favorably responded a little more promptly and therefore a little more surely. The replies indicate that progress is being made slowly and that much remains to be done, for the smaller, less fortunate schools were not included in the inquiry.

The further study made recently thru the courtesy of the educational journals, in printing a questionnaire, does not add in any material way to the information as gathered in former studies. Window-washing, for instance, continues to vary from once a week to summer showers. Thruout it is noticed that it is with rare exception that any definite standards exist with regard to cleaning. While I do not know with any definiteness that the same conditions exist in other lines of janitor work, yet I will venture that many of you are ready to agree that the same conditions do exist and that there is a general absence of definite standards with regard to lighting, heating, ventilation, and practically all of the lines of janitorial service.

Now for a few minutes I desire to defend the thesis that it is possible to fix definite standards and thereby to increase greatly the efficiency of janitorial service. As regards ventilation, we know that each pupil is entitled to 200 cubic feet of air space with an inflow and exit of 30 cubic feet of air per minute. It is possible to measure and insist upon this standard of fresh air. We know that foul air is conducive to catarrhal and pulmonary diseases, and that contagion spreads under such conditions. We know, on the other hand, that fresh air is very closely related to a fresh mind, to progress and success.

In the matter of lighting we know that clear, clean glass should equal one-fourth the floor space, that the light should come from one side of the room only, that no light should come from the side of the room opposite the teacher's desk, that the width of the room should not exceed 30 feet from the left side, that chipped glass reduces the amount of light from 25 to 50 per cent, that the upper one-fourth of the window furnishes one-third of the light, etc. We know also, that this is directly related to cleaning, that dirty windows mean a reduction in light varying from 10 to 50 per cent. Knowing all of the foregoing, it seems possible to determine a definite standard for lighting and in any particular locality a definite standard for cleaning the windows. It is just as surely known that this will not be secured by a direction to wash the windows "when dirty" or "as often as needed."

As regards humidity, we know that enlarged tonsils, catarrhal diseases, generally nervous and anæmic conditions follow the failure to humidify the air properly. We have a definite standard fixing a lower limit as 60 per cent and the upper limit as a relative humidity of 70 per cent. We know the methods by which to secure the proper standard of humidity. So here again it would seem possible to fix and to carry out a definite standard.

With reference to the temperature of the schoolroom, we know that a uniform temperature of 68 degrees means from 25 to 50 per cent less coughing and colds in the schoolroom than a temperature of 72 degrees. We know that excessive temperatures mean a weakened condition, rendering the child susceptible to disease and impeding progress in school work. We were told by the Science Department of this Association last year that the temperature should never under any circumstances be permitted to pass 70 degrees Fahrenheit, the lower limit being 66 degrees. In regard to temperature there is certainly one standard which can be fixed with confidence. And yet we find a wide variation from this standard and a prevalence of high temperatures.

The foregoing brief discussion calls attention to the fact that in addition to cleaning there is a possibility of definite standards of janitorial service in connection with ventilation, light, humidity, and temperature.

Now permit me to return to my own situation and to report what we have accomplished during the past two years in regard to schoolroom temperature and cleaning, and the means employed to secure the results.

The schoolroom temperature has been reduced from a variable ranging from 70 to 75 or 80 degrees to a close approximation to a constant at 68 degrees Fahrenheit. This has been accomplished thru special attention to the matter and requiring a report on alternate weeks showing the temperature at five chosen times thruout the day. The record is made by pupils in upper grades.

A janitor's schedule fixing standards and organizing the work at each building has been most effective in securing results in cleaning. The schedule varies slightly with different buildings. The janitor's schedule for our central building is given herewith.

JANITOR'S SCHEDULE

1. *Yard.*—Papers picked up daily, walks swept daily, morning. Ropes for may poles and swings put up before 8:00 A.M.
2. *Scrubbing.*—Scrub all toilet floors and urinals twice per week. Wash seats with warm water, gold dust, and coal oil—Wednesday and Saturday. Scrub gymnasium once per week—Monday A.M. Once every *six weeks* scrub halls and schoolroom floors—Monday.
3. *Woodwork.*—Once a week wash door knobs, hand rails, banisters with warm water, gold dust, and coal oil—Saturday. Once every *six weeks* wash other woodwork—Thursday.
4. *Walls.*—Brushed down every six weeks. Downstairs third week, upstairs sixth week.
5. *Sweeping.*—All schoolroom, hall, toilet, and basement floors swept *daily* with dust down and brush—evening.
6. *Dusting.*—Done with cloth dampened with water or coal oil. Desks, doors, window sills, and baseboards dusted *daily*. Pictures, doors, and window casings once a *week*—Friday evening.
7. *Blackboards* cleaned each Saturday and troughs swept out daily.
8. *Windows* washed inside and out *twice per month* with bon ami or alcohol.

This schedule secured decided improvement immediately. Any janitor who took an interest and pride in his building welcomed it. It set a standard and systematized his work.

It is not effective to require that the building be kept "in sanitary condition." Whether it is original sin or an acquired tendency, janitors, when left to do things "as needed" or "as often as necessary to insure sanitary conditions," show a decided preference toward toasting their shins in front of a furnace rather than cleaning windows, walls, woodwork, and floors—in halls, closets, and unoccupied rooms. They prefer to leave this work for the annual cleaning period on extra pay during vacation. As janitors are usually paid there is no objection to the extra remuneration, but objection is made to the filthy, disease-breeding conditions resulting, in which children must live.

Recently the plan of requiring a regular report on the cleaning was begun. The report is made at the close of each six-weeks period. It covers washing windows, scrubbing floors, cleaning woodwork, etc., and requires the signature of the teacher in the room. This report keeps the work constantly before the janitor, teacher, and principal, and brings a summary regularly to the attention of the superintendent. It is safe to say, that in the cleaning phase of our janitor work we get fully twice as much work from the same force of janitors with no increase in cost of service.

These measures—definite schedule and regular report—have brought results "of which we do know." Dr. Dresslar of the Bureau of Education has called my attention to a recent development in the way of further improvement and standardization of janitor service. It is the selection of a head janitor centrally located who shall instruct other janitors in details of the work with the notion of bringing the poorest up to the standards of the best.

My investigations and experience justify the following conclusions: First, there is a surprising absence of standards in janitorial service. Second, being physical and manual, almost every phase of janitorial service lends itself readily to standardization. Third, increased efficiency of janitor service and more sanitary conditions for the child follow quickly upon standardization. Fourth, a regular system of reporting aids in maintaining the efficient service required by the established standards.

THE RELATIVE COST OF EDUCATION OF HIGH- AND ELEMENTARY-SCHOOL PUPILS

E. O. HOLLAND, SUPERINTENDENT OF SCHOOLS, LOUISVILLE, KY.

What proportion of the school revenue should be devoted to the care and instruction of the elementary pupils and what proportion to the education of secondary pupils? In glancing thru the annual publications issued during the past ten years, by the National Education Association for its various departments concerned with public-school work, I was unable to find any detailed discussion of this important subject.

At one time, not many years ago, the traditional elementary- and secondary-school work seemed to meet the demands, if not the needs, of the general public. At that time, too, a more careful analysis of the relative expenditures of public money devoted to the elementary and the secondary divisions of a public-school system was not of great importance, since these expenditures could be roughly estimated and a fair proportion maintained. Even with the introduction of kindergarten work in many of the school systems, the danger of weakening the efficiency of one large department of the school work was inconsiderable, especially where the superintendent was given reasonable freedom of initiative. But today, with the establishment, for example, of continuation schools for the pupils who abandon the traditional classroom work at an early age, and with the creation of special schools for the anæmic, the foreign-born, the defectives, and the incorrigibles, the task of maintaining the proper equalization in expenditure is much more difficult and requires a more careful analysis.

This is obvious since most of the special types of schools, recently established, care for children that belong to the general elementary field. Consequently there is a decided tendency to maintain all these special schools from the funds that have usually been set aside for the maintenance of the elementary schools alone. Another additional drain on the elementary-school funds, which should be considered here, is due to the larger enrollment in the grades for which our more effective compulsory-education laws are directly responsible.

So far as I have been able to learn, there is no school system in this country that today is spending too much money on its graded schools, but it is not difficult to give the names of several large cities that are spending entirely too large amounts on their secondary schools.

Unfortunately the more intelligent forces of a community do not wait for an analysis of school expenditures to make known their wishes; they are especially insistent in their demand that the high schools be properly cared for. Generally speaking, only a small group of these same individuals will visit a ward or graded school and demand that more money and effort be expended upon the younger children. As a consequence, the greatest disproportion in expenditure can be found among those cities where expert educational leadership has been ignored and where disproportionate expenditures follow the wishes of a small but powerful group of citizens who do not understand that the granting of their demands by the school authorities will entail hardship upon hundreds of teachers in the grades, lower the efficiency of the whole public-school system, and will be the direct cause of increasing the school mortality at an alarming rate.

The expenditures in the city of Louisville for secondary education have been and are still out of all proportion to what has been spent on the elementary schools in that city. I shall give the details concerning this situation, since I am familiar with them and they serve to emphasize the need of establishing some general standard to determine expenditures.

Louisville is a city of slightly less than a quarter of a million inhabitants, and yet a year ago it was attempting to maintain seven separate high schools. Three of these schools were for girls, two for boys, one—the commercial high school—for both boys and girls, and a colored high school for both boys and girls. When we consider that the city of St. Louis, with a population of 687,000 inhabitants—three times as large as Louisville—is today maintaining but five secondary schools, we can understand that, relatively speaking, Louisville has been neglecting her elementary schools, in which 90 per cent of the entire school enrollment is to be found.

Very recently the members of the Louisville Board of Education began to make an investigation to discover how much of a disparity there was in these expenditures. In comparing Louisville and Indianapolis, cities of the same size, they discovered that the enrollment in the two Indianapolis high schools was in excess of 3,600, while the seven Louisville high schools had an enrollment of 2,700 pupils, or 900 less. Furthermore, they found that, based upon enrollment, it cost $58.77 to educate a high-school pupil in Indianapolis, while in Louisville the cost was $76.76 per pupil. It should be stated here that the Louisville high-school buildings and the laboratory equipment are not superior to the buildings and general high-school equipment found in Indianapolis.

But the discouraging and unfair part of the high-school organization in Louisville was discovered when a further analysis was made, showing that Indianapolis spent on its high schools but 17.7 per cent of its total revenue, while Louisville spent 27.3 per cent. At the same time it was found that Indianapolis expended $34 for every child enrolled in the elementary schools, while Louisville expended but $23.32. This difference between these two cities in expenditure for the elementary schools would be more than $250,000 or approximately $450 for every graded schoolroom in the city of Louisville.

As soon as the above facts were discovered the Louisville Board of Education began to take steps to reduce the abnormal cost of its high schools, and by the middle of this scholastic year, an addition had been erected at the Central Girls' High School building and the three girls' schools combined. At the same time, the Commercial High School was abolished, and the girls in that school were sent to the Central Girls' High School and the boys to the Male High School. As a result of this consolidation, the saving at the Central Girls' High School in salaries of teachers, janitors, matrons, and assistants will be this year in excess of $20,000, and the saving at the Male High School will not be less than $8,000. Furthermore, the enrollment of girls due to this consolidation has not decreased as some predicted; in fact, there has been an increase in the enrollment of between one hundred and fifty and two hundred.

But even yet the expenditure of 23 or 24 per cent of the school revenue on the high schools in the city of Louisville is abnormally high. If the two high schools for boys could be consolidated and a new building erected to accommodate them, it is estimated that between $10,000 and $15,000 could be saved each year. This saving in Louisville is essential to the development of a modern elementary-school system, such as can be found in many of the cities of the Middle West. If this were done additional money could be devoted to the elementary schools, and thousands of boys and girls in the intermediate grades of our public-school system would not then be tempted to abandon their educational opportunities at the end of the compulsory age period. Instead, hundreds of our children would be induced to continue until the seventh or eighth grade, and better still, many of them would find it possible to complete the high-school course of study.

This disproportion in expenditure for elementary and secondary education in Louisville is probably no greater than it is in many other cities of this country, and therefore it will be of interest to boards of education in other places. This disparity in the expenditure of school revenue of course can in no sense of the word be considered typical but will serve to emphasize the need of a more careful estimate of our expenditures for the various school departments.

Certainly we cannot assume that a child in the elementary school is not just as important to the welfare of a community, or to a state, as is a child enrolled in one of our high schools. It is true that the leadership of this country comes from the young men and women who continue their education thru, if not beyond, the high-school course, but the foundations of our social structure are dependent upon the education and guidance of the thousands upon thousands of boys and girls whose economic efficiency and whose social and civic ideals are based upon the work of elementary schools.

Fortunately it will not be long until we shall have some definite standards to set up in estimating the relative amount of money that should be spent for elementary and secondary education, and even on the newer phases of public-school work. Dr. Harlan Updegraff, specialist in school administration of the Bureau of Education, has just made a careful study of the expenses of school systems in cities of 30,000 inhabitants and over. This publication will be ready for distribution within a few weeks. In it Dr. Updegraff states that the object of issuing this publication is primarily "to provide those charged with the administration of public schools in the largest cities of the United States the means of making exact comparisons of cost between any two or more cities." In my opinion this is a most valuable contribution in the field of school administration.

Of the 184 cities in the United States in 1910 with a population of 30,000 or over, Dr. Updegraff has made a minute study of the school expenses of 103 of these cities. In order to make more careful estimates, he has divided these cities into four groups, according to size. Two of these tables "show in detail for each city the annual cost per pupil, based on enrollment, of each kind of expense for instruction, operation, and maintenance of elementary and secondary schools."

After presenting his data, the author raises the question, "What is the range of a proper ratio between average costs of elementary and high schools?" Taking the detailed facts concerning the school expenditures in the 103 cities he studied, Dr. Updegraff states that the best, or at least the most representative school cities—those within the middle 50 per cent of the distribution—spend from $1.80 to $2.60 per high-school child as against $1.00 for every child enrolled in the elementary schools. The median city spent $2.16 upon its high school for every dollar spent on the grades. If this standard could be enforced in many of our leading school cities, the question of elimination and retardation would not give us so much concern, for certainly more children would be saved to the schools and advance more rapidly in their work. Most of us will agree with the author of the bulletin when he asserts:

> In some cities it would be a far better distribution of public funds to take away from high schools having high average cost and high percentage of funds devoted to them and add the same to the broadening of courses in the elementary schools in order to meet the needs of those who are backward or who are losing interest in the present curriculum.

ROUND TABLES

ROUND TABLE OF STATE AND COUNTY SUPERINTENDENTS

TOPIC: AGRICULTURE IN THE RURAL SCHOOL

THE EDUCATIONAL VALUE OF AGRICULTURE

EARL BARNES, LECTURER ON EDUCATIONAL TOPICS, PHILADELPHIA, PA.

Education is everywhere today turning from the predigested forms of knowledge found in books to the real things found in life, from an exclusively intellectual training to developing and disciplining all the powers of the individual. In this movement new groups of activities are being selected and organized as educational instruments. Nature-study, industrial or vocational education, plays and recreation centers, practical civics, and agriculture are among these new lines of study now being urged upon the attention of educators. Of these subjects, nature work and the activities gathering around recreation centers have been pushed forward primarily because of their supposed immediate value to the children. Industrial or vocational training, practical civics, and agriculture have more commonly been urged because of community needs, tho they have also been supposed to possess educational value for the children.

The aim of this paper is to ask what agriculture, as a subject of study, really does to the children who pursue it. And by the study of agriculture we do not here mean the working-over of textbooks or lecture information about climate, soils, plants, and products —we mean, instead, lessons under competent direction, mainly out of doors, in which the children work with real soil; prepare it for planting; select, test, and plant real seeds; cultivate, water, fertilize, and protect the plants that spring from their seeding; and gather and use the products of their labor. If pets and domesticated animals can be added, the possibilities of training are greatly increased.

As a subject of study for children, agriculture has an evil record which it must outgrow. Children all over the world are fleeing from the farms to the city. Isolation, monotonous drudgery, lack of social and spiritual stimulus have made work on the land a thing to be dreaded by all who long for life more abundantly. But we are not here discussing the evils associated with farming for profit, nor the desirability of farming as a business, nor even the need of the community for intelligent and happy farmers. We are discussing the effect of lessons, planned for educational results, not for farm profits, conducted in pleasant school gardens, and on neighboring farms, and stopping short of the empty weariness that makes many of us remember our childhood with pain and regret.

In the first place, then, such a study of agriculture as we have indicated commands from the start a wide range of the interests most common to children. School children are active, concrete, and personal in all that they think and do, as compared with adults. Planting and cultivating things appeal at once to all their native interests. There is something doing all the time; the children are studying concrete things that can be seen and handled; and each child has a steady personal relation to the things he plants and protects or neglects. Even the child's native desire for struggle and contest is amply satisfied thru rivalry with his fellows, and the incessant fight against sterility or overgrowth, drought or excessive moisture, pests or thieves. In most of our older school studies, these interests have to be awakened by indirection and maintained by artificial expedients. In agriculture, they spring to the front at once and the teacher has only to use them. In a word, the study is deeply attractive to normal children of all ages.

Probably all thoughtful educators will agree today that sound education consists in receiving impressions from the external world thru end organs of sense, passing them along afferent nerves to ganglia of nerve cells, where they are registered as images, and generally also compared and associated with other memory images, and then the impulse is passed out along efferent nerves to muscles, producing activity in some way corresponding with the impression originally received. To put it differently, good education, especially in the earlier years, should give the children a body of significant impressions, should lead them to register these as memories and work them up in associated groups and reasoned sequences, and should then pass them over into appropriate expressions.

In the study of agriculture the child is compelled to repeat this cycle again and again. When he walks into the school garden, he observes the soil of his plot, and probably feels it with his hands; he registers these impressions as memories, compares them with impressions of adjoining plots, and then these registered and associated impressions pass over naturally into expressive action with spade or hoe or rake. Again, when he examines the seeds, he gains a body of agreeable impressions thru eyes and hands; these impressions are mentally registered, compared, and associated with memories of other seeds just used or about to be used, and then the impressions pass over into vital expression thru planting.

These cycles are repeated in endless variety across the period of growing a crop. Think of the varied experience from plowing, or spading, thru planting, thinning, transplanting, watering, fertilizing, fighting pests, to gathering and using the produce. When used only for educational purposes, each process can be maintained long enough to give drill and discipline, and yet stop short of the physical weariness and monotony that would destroy the best effects of the training. Meantime, each of these cycles grows out of those that preceded it; and all form a deeply significant series.

Ordinary school tasks give the fundamental cycle of impressing, registering, and expressing only most imperfectly. Even nature-study, so far as it is not agricultural education, whether it is conducted in the museum or in the field, must fall short of actually growing things in which the child is so personally interested. And it is only by passing thru this cycle again and again that the child is prepared, when he becomes a man, to examine, judge, and act.

To approach the whole subject from a different point of view, while the work is new, and before any of the processes have become habitual, a very wide range of mental powers is called into use. As the child digs in the soil, he is forced to observe the hard and the soft, the wet and the dry of loam, clay, sand, and gravel. He sees, feels with his hands, and works in impressions thru the play of his muscles. The inevitable slowness of the process gives time for the impressions to sink in and become permanent. Impressions received while spading up the garden bed are more liable to remain in the mind than those gained in most classroom recitations. So when he comes to plant the seeds, the child sees and handles attractive objects, having definite shapes, agreeable colors and lusters, striking or agreeable tastes. He watches, that is, observes, the earth intently, waiting for the first shoots to come forth. Increased growth and new leaves multiply the impressions. Pests call out intensive observation; he watches the sky for rain; and the final crop rounds out a wonderful series of significant, graduated, related, repeated, and varied observations.

Measures and comparisons are forced upon the child in the agricultural lessons at every turn. In the world of nature, law is supreme, tho no two things are ever the same; and the differences in richness of soil, in rapidity of growth, and in size of products are backed by desire to gain or fear of loss which quicken the processes of the mind. The surface of the plot must be measured, the length of the rows and their distance apart, the rapidity of growth, the part that survives and bears fruit, the quantity of products, and the amount of work, all call for exact statement.

Passing judgment on these observations and comparisons is also forced upon the child. Shall he grow beans or corn? If corn, shall he plant it on this end of the plot or the other? Near his neighbor's corn or away from it? Has he watered it enough or would more be better? Will this plant bear transplanting? How can he do better next year? In working with real and growing things, in which he has a personal relation, all of a child's mental powers are called into play to an extent hardly possible in the artificial exercises of the schoolroom.

With the older children, the problems of soil composition, proper fertilizers, development of useful varieties of plants and animals; fertilization; food values; geographical distribution of plants and animals; working-up of agricultural products, and economic and social problems offer an endless field calling out all the powers of the mind.

On the moral side, lessons in agriculture can admirably train a child in all the humbler virtues of life. He must be careful, exact, patient, and persistent if he would eat of the fruits of his labors. He must work beyond the point of pleasure; and he must wait beyond the span of a child's vision. He must protect his own plot and respect his neighbors'. Above all, he must bow to eternal law. When he neglects to water his plot and his plants fail, there is no chance to complain of unfair discrimination and shift responsibility to others' shoulders. Nature has marked his recitation with a zero and against that decision there is no appeal. He is taught to worship at the shrine of Necessity, and he thereby finds his place in the universe.

So on the artistic side, he may make his plot a perfect oblong or a square. He may have the rows straight or round, the soil free from weeds, well worked, and evenly distributed. He may surround his plot with a good walk, well kept. He may arrange the plants in agreeable groups and he may beautify it all with flowers. All the elementary problems of form, color, and proportion may be realized in the individual gardens, and in the groups of gardens; and so the foundations of a sense of beauty may be laid.

On the social side, too, there is abundant opportunity for emulation and co-operation. Plants will be started in a common hot-bed. The children will lend or borrow each other's seeds, plants, tools, and labor. It is a place where each for himself and each for all wins. The older children will see, too, the relation of their crop to the life of man. They will see that the earth is the mother of us all; that all we have comes from her bounty; that no child born on the earth should be shut away from the use of the earth.

And yet, as a training for life, agricultural education has very definite limits. It gives most superior training in elementary processes of mind, feeling, and character, but it needs wide supplementing. The farming population has always furnished strong basal energy for higher civilization; but the arts and sciences, social sensibility, and power of co-operative action have been developed in the towns. The Roman Cato is the type of agricultural product in the past; hardy, unbending, persistent, frugal, and just, but lacking in imagination and sympathy, he and his kind lay the foundations of empire; but such energy must be passed thru Athens to develop the higher life. Of course, the application of science to farming will lift the level of agricultural life; but the elemental forces of nature cannot yet be sufficiently brought under control by science to prevent their shaping those who deal with them to their own qualities.

Agriculture teaches boys and girls to work, but they also need to learn how to play. School gardens are laboratories of conduct, but the playground is a more advanced class. In the school garden Nature rules with an iron rod, but in the playground the child's spirit finds the open. Soil will be just; but the leader in the games may be generous. Hence every school garden should have as a neighbor a recreation field.

Agricultural education trains observation, comparison, and good judgment; but it discourages pure reasoning. Whatsoever a man soweth that shall he reap, if he does. Storms, drought, or blight may determine the conclusion as well as a major premise of intelligent care. Any farmer who thinks must be a pragmatist, with strong tendencies toward determinism. But meantime the children have minds that are rational and that move independently of storms or drought. Hence they should have pure mathematics, logic, and languages.

And on the moral side, Nature is carelessly fecund, shamelessly prodigal, or niggardly. Of man's higher justice she knows little; and of his mercy, nothing. From his lesson in agriculture, the child should turn to the Sermon on the Mount if he would see the whole circle of man's possibilities.

In fact, for all the larger and freer vision of life the child must leave his garden and go to the mountains and the sea, into man's heart thru history, biography, and literature, into his dreams thru philosophy, music, and the arts.

Our trouble in the past has been that we have tried to take our school children directly into this abstract world of exact thinking and exalted feeling without passing them thru the preliminary stages of concrete experience, elemental virtues, and active self-expressions. Lessons in agriculture will give this fundamental training on which all the higher development of the faculties must rest.

THE NEXT STEP IN TEACHING AGRICULTURE IN RURAL SCHOOLS

E. C. BISHOP, SCHOOLS SECTION, IOWA STATE COLLEGE, AMES, IOWA

There is no common next step in the teaching of agriculture. There is no common next step in teaching any subject.

Dr. Gulick says that there is no common normal condition which may be applied to all children. Associations, hereditary influences, temperament, environment, previous conditions, past experiences—these combine in the determination of what constitutes a normal degree of development which might be called a measurement of human development at any particular period in the case of each individual.

The "next step" implies a step already taken. The next step has direction, speed, form, and objective point. These are determined largely by the previous steps taken, by the condition of the pathway, and by the existing weather and other environmental influences.

The teaching of agriculture has experienced a wonderful development in the short time in which it has been given general recognition. But that development has not been uniform in kind, quality, or rapidity. The development has been sporadic. It has been by individual teachers and other leaders, by school districts, by counties, by states, and by sections of the country.

Agriculture teaching so far has been largely a community affair, depending for advancement upon the number of local or community supporters, their enthusiasm, their powers of persuasion, and the disciples and help they have been able to gather about them and put to work.

Each succeeding community can and sometimes does profit by the experiences of other communities in the development of agricultural education. But up to this time, each community has had to pass thru much of the evolutionary stages of the work to be at the point where the best things in agricultural education might be applied. The ordinary stages of development are somewhat as follows:

1. Recognition that there are some facts, experiences, processes, and applications in agriculture practice which are worth knowing by all engaged directly or indirectly in agriculture as a business, and by those who have an associated interest.
2. Recognition of such knowledge and skill as real education.
3. That such education has economic value and cultural value.
4. That education in agriculture can be given in the public school.
5. That it has a defined body of knowledge and that it has a relation to other branches of learning.
6. That a place can be found for it in the public school without detriment to the teaching of the time-honored required subjects in their old theoretical forms.
7. That the subject merits the support it needs in order that it may be effectively presented.
8. That even tho it upsets some of the time-worn applications of pedagogy, it must have a place and a hearing in schools which train for citizenship, service, and happiness.

For the purpose of securing information which would help me to define the steps already taken in teaching agriculture and the direction and form of the next step which will help the teaching of agriculture to proceed in a direction and with a force that will reach some desired point, I sought opinions from some of those persons who are especially interested and acquainted with the subject by reason of personal experience or official position. I asked opinions of all state superintendents, a large number of progressive county superintendents, some directors of high-school agriculture, and from deans of colleges of agriculture. The replies were prompt, generous, and varied. I had thought of the next step as somewhat plainly defined. But the replies caused me to experience a somewhat dizzy sensation.

Taking thru imagination the next steps suggested, I found myself endeavoring to select between forty-six different directions, kinds of steps, and styles of stepping. I found myself first stepping evenly from one position to the next, then leaping over a number of paces or turning backward somersaults; sometimes alighting in a dignified position on a footing at first seeming solid, then wabbling or falling off my mushroom support. Sometimes I was stretching for a forward reach or a backward extension or a side step both ways. However, it was very good exercise. I have some new pace measurements and know some new stepping values.

Recollecting my experiences with horses, of which I am more fond even than of teaching, I was caused to reflect that the short-legged Shetland, the prairie broncho, the well-rounded coach, the solid percheron, the massive shire, the hamiltonian horse, and the Indian pony each have their ways of stepping—first, next, and afterward; that in the evolution of his kind, the horse yet furnishes us varieties—graduated in a more or less irregular scale from the wild horse who goes it alone to the groomed, trained beauty which requires the constant attention of a man who draws a salary as large as a house full of us pedagogs who do nothing more important than train boys and girls.

Returning to the evolution of agricultural education, I am led to reflect that, strange as it may seem to those who have been in the midst of the struggle for two decades, some communities in the, so to speak, unexplored parts, are yet enjoying the freedom of the wild, free horse which neither supports nor is fed by man. Some communities are in the breaking-broncho stage and the tenderfoot riders are having trouble to keep their seats without "pulling leather"—sometimes not then.

I saw three women riders out at the Custer County fair in Nebraska last year. They were in a three-mile relay race. Two stayed on; one tumbled when the horse fell. An unkind man on the side-lines said that women should not try to ride horses. Only men can know how to keep going around a race track, which might be injured by French heels. Perhaps he was a school officer who yet thinks that only a man can teach agriculture.

Some communities are in the race-horse stage, some in the big draft-horse stage, some the family horse, and some no horse at all. Some ride in autos and some go thru the air.

The step differs according to the speedway, the furrow, the drive, or the pavement; according to the load, the driver, and the stage of evolution thru which roads, horses, loads, and drivers have passed, before the present combination arrived.

Agricultural education is just now growing surely but in patches, as the cocklebur and thistle of the field. It is in some places in the quack-grass condition, where a solid growth of healthy quack grass is disturbed by the plow and its seedling pieces scattered over the whole field, where it develops according to immediate relationships of nourishment and care—sometimes into healthy quack grass, sometimes just quack.

The replies received from more than a hundred school administrators indicate to some extent the stage of development of the respective communities represented. They include the first step, the beginning stages where the work is the arousing of an interest among the people thru farmers' institutes, extension work, contests for young people, county fair exhibits, and state and national aid as an inducement.

The next steps described are those leading to demonstration and experimental work, working with things, not books; providing better-prepared teachers, better-equipped schools, and workable courses of study with state, county, and township supervisors of public-school agricultural education. Some steps lead to the establishment of strong departments of agricultural education in state colleges of agriculture and in state normal schools, and to normal-training departments in high school with elementary courses in agriculture directed and taught by well-prepared men and women.

The replies so generously made to my inquiry are very interesting reading. They indicate conditions or degrees of advancement as well as opinions of procedure. Analysis of the opinions reveal two striking peculiarities: first, the diversity or variety of different next steps suggested—there were forty-six of these; second, the uniformity of opinions coming from communities which are enjoying the same comparative degree of development in agricultural education. I regret that I cannot read to you many of these well-worded, carefully thought-out opinions, offered by men and women who have great interest in this subject.

The next steps suggested include everything in agricultural education from a boys' corn contest to a college course in agriculture. They include method in all its stages from story-telling to well-equipped laboratories and field experiments. They include activities from the dainty teacher who must put her hands into the soil; to the township, county, and state special directors of agricultural education work.

They include equipment from an empty crayon box to fully correlated and equipped, specialized courses of study from the kindergarten to the college-graduate work. They include reorganization work all the way from timidly asking for a hearing under an assumed name in the nature-study, geography, physiology, botany, physics, chemistry, zoölogy, spelling, language, reading, and arithmetic classes to the urgent demand for a complete reorganization of the entire courses of study so as to give agriculture its proper place in the great scheme of education.

These opinions ask for assistance all the way from a rural-school officer's friendly attitude to state and national aid and drastic legislation which would force the teaching of the subject all at once everywhere whether teachers are prepared or not and without the consent or the interest of the parents. They include desired literature all the way from picture cards and ready-made charts to impeachable textbooks and encyclopædias which never become out of date.

But I have already given you the summary which indicates as great a diversity of steps as there are conditions of advancement in the work of communities.

Each community is ready for the next succeeding step as previously indicated. Some communities take two or three of these steps at once, then proceed forward with a backward form of step for a distance in order to slacken their pace with dignity and prevent retreat until the foes in front grow weary (and wiser) and the good folks in the rear catch up.

But the general onward march is with about the same formation and speed except in those places where an especially strong leader breaks away with his followers and enters the newer field on his own initiative and responsibility.

But I was to point out the next step. This next step is the one for which the most advanced communities are now ready. The other "next steps" demanded have already been taken somewhere. The step called for by far the greatest number of educators whose opinions I sought is the important step which must now be taken if the teaching of agriculture in rural schools or in high schools is to be given properly. It is that of the better preparation of teachers for the work. Better teachers with better training in agriculture is the crying need just now which must be met if the work is to be advanced, or even saved from disastrous affliction.

The demand for the teaching of agriculture in the communities where the preliminary work has been done is already much greater than the present number of properly prepared teachers can supply. We cannot, and would not if we could, stifle the demand for agriculture teaching. It is a healthful cry for hygienic educational nourishment. We must provide the required teachers. These teachers must come from strong departments of agricultural education in colleges of agriculture to supply high-school and normal-school teachers of agriculture. They must come from normal schools to supply grade teachers in towns and cities and village high-school teachers. They must come from normal-training high schools to supply teachers for the rural schools. The rural schools' greatest hope just now is the courses of normal training provided in high schools for the elementary training of those persons who are to become rural-school teachers. New York state, Nebraska, Kansas, Minnesota, and Iowa are some of the states already doing this and the good work is spreading and growing within.

While we are preparing these needed teachers, we may well be working out better courses of study in agriculture not only for rural schools but for all public schools. Agriculture as a subject has not yet settled down into its proper place in the public-school curriculum. A shifting of the entire science course and a better correlation with other branches are the movements under way which will require the second next step after we take the one now needed in the better preparation of better teachers for the rural schools.

DISCUSSION

Reed B. Teitrick, deputy superintendent of public instruction, Harrisburg, Pa.—The growth of agriculture has modified the civilization of the world. It has been a factor in abolishing cannibalism, producing slavery, and modifying governments. The "nest places" of civilization and the homes of the classic nations have been the garden spots of nature. This morning more than ninety-two million people in the United States awoke and turned their faces to agriculture for their breakfasts. How many domestic animals—mute partners of toil—were fed from the same source cannot be accurately stated. Can such a subject be without some educational value? Comenius said that as far as possible men are to be taught to become wise not by books but by the heavens, the earth, oaks, and beeches; that is, they must learn and examine the things themselves and not the testimony and observations of others about things. Children are raw material waiting to be developed. Agriculture is one of the chief subjects which links man to mother earth. It employs the hand as well as the head.

Nature has been man's teacher. Nature-study is the starting-point in teaching agriculture. I do not mean a weak sentimentalism about nature-study. I mean that power which comes from seeing, handling, and making things and drawing proper conclusions from the impressions gained in these ways. Whether agriculture shall have an educational value or be mere speculative theory depends wholly upon the way it is taught. There must be a sharp distinction between teaching city children the most elementary fundamentals which they need, and the classification and application of scientific principles based upon facts which rural children already possess.

There are two basal laws of teaching and they are equally applicable to theoretical and to applied education. They are, first: that the learner must be taught on the basis of what he knows, and second: on the basis of what he does. Teachers of today are not satisfied to fire blank cartridges; they want to hit the bull's-eye. We *must* look to those forms of education, then, which end in something and express themselves in some form of human activity. Agriculture does this. It relates the student vitally to nature and to life. It is active and constructive. It is rich in human interest. It is only by appealing to a child's knowledge and interest that mental growth can be accomplished. The old speculative problems of metaphysics are gradually being supplanted by the tangible methods of the laboratory. The study of agriculture not only affords opportunity to make use of the principle that interest in life-forms precedes that of interest in inanimate nature and abstractions; but it also accomplishes another important object of modern pedagogic endeavor—that of increasing the unity and joint interest of the rural school and of the home. Agriculture employs the time and claims the attention of more than one-third of our population. It feeds us all; and as we have already observed, the future of a people depends upon the productions of their soil.

If the teaching of any subject is to be effective it must bring about a close adjustment to life. If it is real it will be educative. If it is educative it must have to do with real things. The student soon learns that cause and consequence are inseparable and certain; that the forces of nature are allied with him in his struggle for mastery and that results cannot be doctored. I believe the study of agriculture will bring about a changed attitude toward life. It will broaden and deepen the channels of thought and instead of walking as heretofore, blindly amid the great forces of nature, we shall see order and beauty and law in the origin of the soil, in the summer shower, in the plant, in the flower, and in the fruit. Can a mind be brought into close touch with nature day after day, feeling the influences of its beauty and grandeur and blessings, without being lifted to a higher plane of thinking and living? Improvement of mind comes from the exercise and expansion of the power to perceive and reflect, from habits of attention and application, from self-control and self-respect. How shall we have a harvest of thought unless we have a sowing of sense impressions?

Culture stands for the ability to appreciate the beautiful in art, in literature, and in nature; and the dignity of labor and true nobility of human conduct. Agriculture taught by competent instructors with suitable equipment, combining thinking with doing, is therefore one of the best means for mind-training, especially to those who have faith in the farm and rural life. To them in this subject the arts of the school are related to the arts of life, and aside from its economic value which certainly is not least, there are also the greatest possible educational and disciplinary opportunities. It not only awakens interest and gives purpose but it teaches industry and self-reliance. These are virtues that underlie all culture, character, position, and power.

Dean Davenport of the College of Agriculture of the University of Illinois gives seven reasons for teaching agriculture in the public schools. As they have an educational value I quote the following from them:

First: To cultivate the active and creative instinct, as distinct from reflective and receptive, that are otherwise almost exclusively exercised in our schools.

Second: To give practice in failure and success, thus putting to the test early in life the ability to do a definite thing.

Third: To train the student in ways and methods of acquiring information for himself, and incidentally to acquaint him with the manner in which information is originally acquired and the world's stock of knowledge has been accumulated.

Agriculture is well adapted to build up true American citizenship. It blends literary, ethical, scientific, and industrial training into a strong, sensible, inspirational scheme of education. It is social as well as scientific. It is unquestionably as stimulating to manly endeavor and moral civic excellence as ethics and kindred subjects which deal exclusively with the formal studies of education.

M. P. SHAWKEY, state superintendent of free schools, Charleston, W.Va.—The assumption is fair. Important beginnings have been made. Experiments have been conducted and reports printed and distributed. Books have been published. Laws have been passed requiring the science to be taught. Still the results have not been as big as we desired.

The great trouble with our teaching thus far seems to be that its effects have been confined to the towns and cities and to the colleges instead of its taking root in the country where it must operate if it is going to produce crops.

To reach the country we are now turning to the rural schools. We find, however, that to reform the agriculture of the centuries is a big job for so small an institution as the single-room country school. That school does not seem to get hold of the problem in such a way as to do the work. Yet no other school can do the work if it is to be done in the country.

What then is lacking in the country school? Evidently something, and we need not go far in an investigation to discover *one* cause of the trouble, and to my mind the chief cause of it.

So long as a majority of the teachers in the rural schools are girls merely graduated from short dresses, spending a few months in the schoolroom in waiting for their wedding gowns, we need not expect any very serious instruction in farming in those schools. Such conditions must be changed. We are laying a good deal of stress on the importance of training teachers to love their environment. We want them to appreciate country life. But we must never expect them to prize country school teaching more than life in their own home. If we teach them to prefer the veil to the wedding gown, we shall commit a grievous mistake. Great as is the need of these girls in the schools, greater is the need of them in the homes. Moreover, they are moved by a higher impulse and one which we could not change if we would.

The thing which we can and must change is the condition. Managing a school plant, whether it be an institution of a hundred rooms or one of a single room, is a man's job or a woman's job—not a girl's. We should not expect a young girl or boy, single handed and alone, to handle such a problem. When we equip the country school on a scale commensurate with the work we expect it to do and pay a salary that will justify a man or a woman in making a life-job of teaching, then we may hope to revolutionize the country; but we cannot reasonably hope to do so until a radical change is effected in the provisions made for the country school.

The average salary of teachers in the rural schools and grades thruout the United States is $50.00 per month for a year of less than eight months. Such standards are too low. We should provide a minimum salary of $75.00 per month for a minimum term of eight months. When that is done the country school will show more solidity, more vitality, and more influence in the community. It will be able to teach agriculture or literature or anything else for which the public exhibits a great need.

So long as we pay the chauffeurs, the janitors, the saleswomen and office girls, the mill hand and the miner, the policeman and the hotel clerk, more salary than we do the teacher, it will be necessary for us to continue asking, What shall we do to be saved? So long as we continue to pay the barber and the hairdresser more to shape up the outside of our heads than we do the teacher to mold the inside, just so long will the outside work be done better than the inside. We must not expect more of our schools than we put into them. As a nation we felt rather proud of ourselves that we spent $400,000,000 on our schools last year. But we forget that we spent a fourth of that amount for candy and chewing gum, three-fourths that amount for tobacco and cigars, and one and one-fourth that amount for alcoholic liquors. That is, we are proud that our schools are worth four times as much as our candy and chewing gum, one and one-third times as much as our tobacco, and 80 per cent as much as our Tom and Jerry.

While we have done well, yet I want to assert that there isn't a state in the union that has invested in its schools up to the maximum of profitable investment. But if you get down close to the taxation district you will hear a complaint about taxes and the people will ask, Where are we to get the money? It might be to the point to answer, give up a little of your candy and chewing gum, your tobacco and your gin and toddy, but possibly that would be asking an unreasonable (?) sacrifice, so let us say, give up a battleship or some of your extravagance in federal buildings. Perhaps we might act on Professor Bagley's suggestion and reverse the process by supporting our schools for awhile on tariff revenues and run the government by direct taxation. Soon after we do that there will be a volcanic eruption, but the schools will come out of the turmoil bigger and stronger than they have ever been before.

As a step in the right direction, let us have a federal appropriation of at least one dollar per capita for every child of school age in the nation. Make it contingent upon each state, raising a fixed sum per capita also, if you please, but at all events let us have the money and invest it in our schools. Then we may justly ask those schools to do the greater work for the nation for which economists declare there is so great need at present.

As a second step let the taxes on railroads and other public-service corporations be collected by the state and distributed thruout the state on the per-capita basis instead of being bunched in the districts where such corporations happen to operate, as is the case now. These two plans would fill up the country treasuries and enable the rural districts to pay such salaries as would attract and hold strong, experienced teachers. They would be enabled to provide proper equipment and proper supervision with the result that the schools would take a potent part in teaching agriculture, in promoting the good roads crusade, and in fighting the battle for public health.

ROUND TABLE OF SUPERINTENDENTS OF LARGER CITIES

TYPES OF SPECIAL SCHOOLS IN THE LARGER AMERICAN CITIES

ANDREW W. EDSON, ASSOCIATE SUPERINTENDENT OF SCHOOLS, NEW YORK, N.Y.

Your chairman invited me to make a summary of the movement in the large cities of this country during the past ten years toward the establishment of schools for the education and training of special groups of children.

In complying with this request I confine myself largely to a consideration of the so-called exceptional children, partly because of the time allowance—twenty minutes—and partly because of the magnitude of the problem.

At the meeting of the National Council in 1907, the president appointed a committee of five, Messrs. Van Sickle, Edson, Pearse, Wolfe, and Fitzpatrick, to make a report on the provision for exceptional children in the public schools of this country. At the Cleveland meeting of the Council in 1908 a preliminary report was presented with the recommendation that a committee be appointed and an appropriation made to continue this tentative study, but owing to a real or imaginary scarcity of funds the appropriation was not made and the work of the committee ceased. The work, however, was taken up two years later by Messrs. Van Sickle, Witmer, and Ayres under the auspices of the United States Bureau of Education, the result of whose efforts is embodied in *Bulletin No. 14*, 1911, recently issued.

In order to secure the latest information on the progress made in this line during the past few years, I addressed a circular letter of inquiry a month ago to the superintendents of one hundred of the leading cities in the United States. The following is a copy:

1. Does your city make provision for the education and training of (1) truants, (2) incorrigibles, (3) mental defectives, (4) the backward, (5) rapid advance, (6) blind or sight defective, (7) deaf or hard of hearing, (8) crippled, (9) tuberculous, (10) anæmic, (11) stammerers, (12) epileptics, as a part of its public-school system? In what year was provision made for each?
2. Which of these classes are cared for in buildings apart from so-called normal children? Which in school buildings with regular grade work?
3. What special equipment is provided?
4. What special course of study is provided?
5. What special preparation is required of the teachers? Is any additional compensation offered?
6. What success has been attained in this work so far as you have observed?
7. Is the sentiment in your city favorable to an expansion of this work?

From the 75 answers received I find that 32 cities are making special provision for truants, 31 for incorrigibles, 31 for mental defectives, 32 for the backward, 19 for the rapid advance, 9 for the blind or sight defective, 15 for the deaf or hard of hearing, 7 for the crippled, 14 for the tuberculous, 14 for the anæmic, 6 for stammerers, 2 for epileptics, as a part of their public-school system.

The point of special interest in these returns, however, is the surprising fact that in 25 of these cities no provision whatever is made for the education and training of any of these exceptional children, while 12 cities confine their attention specifically to but a single class, as follows: 5 to truants and incorrigibles (classifying them together), 5 to backward pupils, 1 to advanced pupils, and 1 to tuberculous. This confession is a sad reflection on the superintendents of the cities where the exceptional children are so neglected.

In a few cases truants and incorrigibles are committed to country truant schools (as in Massachusetts) and in most cities, as yet, mental defectives, the blind, and deaf are committed to state or private institutions.

Some of the replies to the question, "Does your city make provision for the education and training of exceptional children as a part of its public-school system?" were as follows: "This city has no schools of any of the classes named in the circular—*wish it had*." "The matter has not yet received much consideration." "This city should probably be classed as 'backward,' I regret very much to say." "There are no indications of any sentiment in favor of the expenditure of money for the education of these exceptional children—it surely would be favorable if aroused." "There are hardly enough of these exceptional children to warrant the organization of special classes." "Our board of education has recently adopted a system of medical inspection which will probably lead up to some special instruction of defectives." "We expect to make a beginning soon."

The problem, therefore, is not yet fully solved. A good beginning has been made—only a beginning, however. In cities where any provision has been made for the education of these children, it is clearly evident that but comparatively few as yet are cared for in our public schools. The children are with us, and public sentiment can be aroused easily if the superintendent is at all interested.

From the answers to the question, "Which of these classes are cared for in buildings apart from so-called normal children, and which in buildings with regular grade work?"

I find that where provision is made by the school authorities for the education and training of these exceptional children, there is a wide difference in the plan of housing them. Some are in regular school buildings and some in separate buildings apart from normal children as follows:

	In Regular School Buildings	In Buildings Apart
Truants	10	22
Incorrigibles	12	20
Mental defectives	24	10
Backward	27	5
Rapid advance	16	1
Blind	7	2
Deaf	8	8
Crippled	4	4
Tuberculous	5	10
Anæmic	9	6
Stammerers	6	0
Epileptics	1	1

In a few cities both courses are followed, some of the exceptional children being cared for in school buildings where the ordinary grade work is carried on and others cared for in separate buildings.

It is clearly evident here that in many cases the ideal is obliged to yield to the feasible. In many places the regular school buildings are crowded, children by the hundreds, even thousands, obliged to be content with part-time instruction. In such cases it is a grave question whether rooms in the present school buildings should be taken for any of these exceptional children and thus increase the congestion. On the other hand, if some rooms or buildings under the control of the board of education cannot be secured where a beginning may be made at once, that beginning possibly may be deferred for years. The part of wisdom, therefore, seems to be to utilize for these exceptional classes vacant rooms in regular school buildings wherever found, or to take rooms already occupied, even if it necessitates part time in the first and second years. The first step to be taken is to find a room for the purpose. "Where there's a will, there's a way."

The argument for the segregation of truants, incorrigibles, and tuberculous children is based upon the protection and good of the other children. This argument will not hold in the case of other special classes.

In the case of mental defectives—and by this term is meant those children who are somewhat subnormal and yet capable of mental improvement (all imbeciles and idiots being institutional cases)—the advantages of providing for their instruction and training in regular public-school buildings are many. In the first place, these defectives are of all grades. Some of them are but a little off from normal, cases of slow development it may be, some of them are behind in only one subject, so that with individual attention in their studies and with much attention given to physical and manual training, they may soon gain enough to be allowed to go to regular classes at certain periods each day for instruction in the subject in which they show the most interest and greatest aptitude. Again, the opportunity to associate with normal children on their journeys to and from school, on the playgrounds, and in some of the general exercises of the school must be of the highest value to the handicapped. The fact that they are with normal children for a portion of the time must have a much more tonic influence on their mentality than would the realization that they are set apart as dullards. And, again, the education of these classes in regular school buildings provides accommodations for the children near their homes and is also an economical arrangement for the city.

The great argument in favor of having the blind and deaf instructed in the regular school buildings is that parents may not be obliged to make a choice for their children between ignorance and institutional life. The training that they get in their intercourse with normal children is of the highest value. When parents understand the matter, they invariably choose the public school to an institution for the education and training of their handicapped children.

It takes but a short time for a blind child to learn to read and write by a system of raised dots and to use the Braille slate and typewriters. He is then assigned to a regular grade class with sighted children and does all the work except in writing and drawing. His written work is interlined by the special teacher and returned to the teacher of the sighted class for correction. Additional lessons in handwork and special exercises in corrective gymnastics are given by the special teacher. These children often skip grades and lead their classes. Their progress is marvelous. In the case of the deaf and blind the classes must be small—not exceeding ten—if the best results are to be obtained. The expense in carfare for these exceptional children, if the distance from home to school is great, is usually borne by the city. In the case of the blind the carfare of a guide must also be included.

In several cities the school buildings are used during the summer months for giving the boys and girls who remain at home during the long vacation an opportunity to engage in some form of vocational or industrial work, or of making up back work, gaining promotion to an advanced grade, or of strengthening themselves in their regular grade work. The plan of utilizing the school plant during the months of July and August is growing in favor from year to year.

The replies as to special equipment provided were varied, some of them being, "Such as necessity dictates"; "Material for handwork and constructive work"; "Largely manual and physical"; "Whatever the expert asks for"; "That is still one of our problems."

In nearly all of these special classes emphasis is and should be placed upon manual and construction work. The special equipment usually provided for a class of fifteen mental defectives, as large a class as can well be handled, is fifteen movable and adjustable seats and desks, four or six work benches and equipment, physical training equipment, a piano, and running water and porcelain sink if possible.

For classes of the blind there are usually ten adjustable seats and desks, type slates, drawing cushions, grooved rulers, a typewriter, textbooks with embossed Braille.

For classes of the deaf there are usually found ten or twelve movable and adjustable seats and desks, hand mirrors, a large mirror, vibratory tube, a guitar, tuning fork, Northampton charts, or some equally good for the classification of elementary sounds and for word drill, and many objects to aid in developing the sense of touch.

For the crippled there should be provided adjustable chairs of a special pattern, foot and leg rests, reclining chairs, and a couch.

For the open-air classes there are needed adjustable and movable seats and desks, reclining chairs, a scale for weighing and measuring, chair bags, leg blankets, soapstone foot warmers, worsted toques, woolen gloves, outside coats, and equipment for a simple kitchen.

For the crippled, tuberculous, and anæmic children, provision should be made by the school authorities or by outside organizations for medical treatment and nourishing food, and for a nurse to assist the school physician and to visit the homes. By this visitation the home condition can often be greatly improved.

The replies to my inquiry as to the course of study provided seem to indicate that in practically every city the greatest liberty of interpretation is allowed. Some of the replies were, "No special course of study is provided, but liberal modifications of the regular course are allowed"; "The work is adapted to meet the needs of each individual"; "The course is largely discretionary with the teachers of the classes, the health and mental ability of each child being the guide"; "Freedom of interpretation"; "Special attention given to the fundamentals"; "Manual training and industrial work predominates."

From these replies it would seem that in these classes the child rather than the subject is the center of interest, and rightly so. What a fine thing it would be to have this idea prevail in grades with normal children!

More flexibility, more liberty of interpretation, greater study of the needs of the individual, are the demands of today in schools where intelligence is at the helm.

The answers to the inquiry as to the special preparation required of teachers and the additional compensation granted indicate that skillful teachers from the regular corps are usually selected for the teaching and training of exceptional children. In this particular work the measure of success attained depends upon the teacher in charge, even more than with normal children who will make fairly good progress even when handicapped by merely passable teachers. In many cities the teachers of mental defectives are required to take summer school or extension courses at institutions for the feeble-minded, or to spend a few months in a careful study of the work of these institutions. The fact remains, however, that a large majority of these teachers have had little special preparation for the work.

Teachers of the blind and deaf must of necessity have had a special preparation, or at least must have studied for some months with teachers at work in such schools. Teachers of the open-air classes can readily be found from among those who have a slight inclination toward pulmonary complaints and need open-air work. Teachers of truants and incorrigibles must have in a marked degree firmness and a strong personality. In fact all teachers of these special classes should have a natural aptitude for the work—infinite patience, tact, resourcefulness, intense human sympathy, an appreciation of effort, and unbounded faith in the young people intrusted to them. Such teachers should also be students of the latest literature on the subject—which is abundant—and should make frequent visits to other schools where special instruction is given. As Dr. Johnstone well puts it, "We need above all else forward teachers for backward pupils."

In most cities additional compensation ranging from $50 to $150 per year is allowed teachers of special classes. This extra compensation, the small classes, and an interest in a special line of activity serve to bring volunteers to the front whenever teachers are needed.

The inquiry as to the success attained in the work undertaken met with the following responses: "The success is twofold—better individual progress and the rooms freed from the hampering influence of pupils who cannot be reached in the ordinary way"; "Marked gain physically, mentally, and morally to all pupils, and especially to normal pupils because of the segregation of the submerged tenth"; "Coaching of backward pupils caused 50 per cent to be promoted"; "Results with mental defectives have more than met our expectations"; "Some surprising results noted with pupils in every special class organized"; "Discipline thruout the system improved"; "Success has warranted a slow but steady expansion of special work, as the needs have been more clearly seen."

A few responses showed a little hesitation in claiming much success in training truants, incorrigibles, and mental defectives, but the answers as a whole indicated a deep interest in the problem and satisfactory results.

And to the last inquiry, "Is the sentiment in your city favorable to an expansion of this work?" the following replies were received: "Favorable to making provision for all classes named above"; "I have heard no adverse comment; newspapers are generally very much interested and give more space to our special schools than to any other"; "Sentiment growing gradually"; "Practically all of the parents are eager to have their children take advantage of the special schools, while practically all of the pupils do more than normal work in these grades"; "Some of the women's clubs and improvement clubs are quite enthusiastic over the care of these special classes of children"; "Strongly favor open-air classes, doubtful about truant schools"; "Yes, consistent with the tax rate"; "The only objection advanced is the expensiveness of the work"; "Finances and lack of room have retarded the movement"; "Conservatism has dominated here"; "The only obstruction is an antiquated charter which does not give the Board of Education authority to include these activities"; "A few people are very much in earnest, the large majority are indifferent."

These replies state fairly well the efforts that have been made and the success attained in most of our large cities to provide an education for exceptional children. It is a fundamental proposition, tho not yet fully recognized in many communities, that every child is entitled to all the education he is capable of receiving. This proposition implies that it is the duty of the state to educate the subnormal, physically handicapped truant, and incorrigible child as well as the normal child, *irrespective of cost.* The birthright of every child is a place in the world and a training that will fit him to fill that place as successfully as possible—to be happy, self-respecting, self-supporting.

Time will not permit me to summarize the development of trade schools, commercial schools, manual-training and technical schools as a part of the public-school system.

I wish, however, to dwell for the few remaining minutes on a line of work that is being carried on by the Board of Education of New York City in an earnest attempt to solve the problem of industrial and vocational training for boys and girls who will drop out of school as soon as the law allows. These vocational schools admit graduates of the elementary schools on presentation of their graduation cards, and under certain conditions other pupils who have not graduated, provided they are fourteen years of age. As a matter of fact, only about 60 per cent of the attendance in each school are graduates of the elementary schools.

The school for boys is designed for boys who desire a preparation for industrial work as distinguished from office work. The particular vocational subjects offered to boys are wood work, including house carpentry and construction, cabinet making, and bench work, wood-turning, pattern-making in wood, and the use of wood-milling machinery; metal work, including general machine-shop practice, sheet metal work, forging, plumbing, molding, and pouring patterns; electric wiring and installation; printing, including estimating costs, imposition, composition, and presswork; and bookbinding.

In addition to learning the elements of a trade, the boys are given a thoro course in free hand and mechanical drawing, industrial design, and the making and reading of blue prints.

The non-vocational subjects taken by all are trade mathematics, including arithmetic, the use of symbols as found in elementary algebra, and plane geometry and trigonometry as used in the trades; English, including business letters, reading, drawing of contracts, and written specifications; industrial history, civics, industrial and commercial geography, applied physics, industrial chemistry, simple bookkeeping, and the elements of commercial law. In connection with their regular work the boys are taken to visit museums, lumber and supply yards, industrial plants, factories, and construction jobs; and representatives of various activities are invited to address the boys from time to time on the topics in which they specialize. Thus the work of the school is made eminently practical.

It is probable that the activities in this school will be increased in the near future by the addition of auto-repairing, sign-painting, electric power machinery, photo-lithography, monotype and linotype operating in the printing department.

The course of instruction in this school is designed to increase a boy's earning capacity by giving him a training which he could not hope to secure if he started to work as an unskilled apprentice. It gives him an introduction to all types of machines and so enables him to avoid being a one-machine man.

The length of the course is two years, tho only one year for the printing course. The school is open every month in the year except August. The school day is from 9 A.M. until 5 P.M., lengthened to accustom the boys to the realities of the business world. Trade drawing and the non-vocational subjects occupy about one-fourth of a school day.

Evening sessions in this school were opened this month for the first time and over 750 boys registered.

The Manhattan Trade School for Girls offers an opportunity for girls to learn to be skilled workmen in a short time and in a larger and more intelligent way than thru trade training alone.

The vocational courses offered to girls are (1) electric power operating, including general operating, shirtwaist-making, children's dressmaking and underclothing, women's underwear, kimonas, and dressing sacques; special machines for hemstitching, buttonhole making, and embroidery; dressmaking, operating in lingerie, fancy waists, and suits, and straw sewing in women's and men's hats. (2) Dressmaking, including uniforms, aprons, white work, simple white embroidery; gymnasium and swimming suits, and dresses. (3) Millinery, including elementary work for assistants, improvers, frame-makers, and preparers. (4) Novelty work, by use of paste and glue, in sample mounting, and sample book covers, labeling, jewelry and silverware cases, lamp and candle shades.

In addition to the vocational courses named above, all pupils take a course in elementary and advanced art, adapted to the work of the trade departments, and pursue such non-vocational subjects as business arithmetic, business English, industries, and textiles, civics, ethics of the trade, and the cost of living, and receive physical examinations and treatment, invigorating, corrective, and recreative exercises, and talks on hygiene and health.

A placement secretary advises the girls as to the kind of work they are to take up, keeps a close watch upon the trades in order to know the kind of work for which there is a demand, recommends girls to places, and keeps a record of them after they enter a line of work.

The length of the course is one year. The school is open every month except August, from 9 A.M. until 5 P.M. each day. The school is crowded to its fullest capacity, the maximum attendance being 400.

The main expense connected with these schools is in the equipment. In the school for boys much practical work is done for the Board of Education in printing, bookbinding, wood-working, repairing, electric wiring, and plumbing, which materially reduces the per-capita cost. In the school for girls the sale of articles amounts to more than $1,000 per month which is turned in toward the support of the school in the purchase of raw material and supplies. In fact it is expected that the school will be nearly self-supporting this year.

In view of the progress that has been made of late in organizing special schools, and of the light that has been thrown on the efforts put forth, I beg leave to offer the following suggestions for the consideration of the superintendents of our larger cities:

1. We have but just entered upon a great movement. As yet we have not grasped the problem, merely touched it with our finger tips. On one plea or another—lack of funds, lack of rooms, lack of trained teachers, or lack of public interest—we superintendents neglect our opportunity and content ourselves with providing for the education of normal children only, or at least of a comparatively few of those who need special courses and special training.

In any city of ten thousand or more inhabitants there are pupils enough for classes in all the groups named, save possibly epileptics, pupils that should be segregated and be given attention and instruction that will best meet their needs.

2. With the exception of truant, incorrigible, and tuberculous children, the classes can best be organized in regular school buildings. In this way the rooms can be secured quickly, the expense will be greatly lightened, and the children will be favored in the distance to be traveled and in their association for a portion of the day with normal children.

3. A beginning may be made thru the department of health. Medical school inspectors and school nurses should open the way thru their investigations and reports to the need of special care and instruction of exceptional children.

4. The superintendent should insist upon small classes and skilled teachers for exceptional children, even if the cost is large. In some cases, as in the education of the

blind, the per-capita cost will be increased four or five times, but it will be money well invested. The people will not begrudge the expense when they understand the work carried on.

5. School buildings should be open thruout the summer for the accommodation of those children who remain in the city and desire to make up back work, to strengthen themselves in regular class work, or to take up some line of industrial work. It is surprising how many children will take advantage of the opportunity to attend vacation schools when the opportunity is offered.

6. For those boys and girls who *must* leave school at an early age to engage in some line of industry, the city should establish vocational schools that will offer practical courses in various lines of industrial activity to all who are fourteen years of age without regard to their academic training or to the fact of graduation from any school.

7. If the board of education cannot secure the necessary funds for the support of any of these special activities, there are, thank God, people of means and warm hearts in any community who will respond to any reasonable appeal for financial support of the schools named above. All that is needed is a superintendent of positive ideas, warm heart, good sense.

8. And in undertaking work along any of these lines, we superintendents should do more than be satisfied to care for the few exceptional children on our hands at the time. We should study causes, methods, treatment, progress, results, and inform the public of the same as well as pass along our experiences to our neighboring fellow-workers for their guidance and direction.

A DEFINITE PROPAGANDA TO IMPRESS UPON THE AMERICAN MIND THE NECESSITY OF AN EXPANSION OF THE FIELD OF EDUCATION TO PROVIDE AS AMPLE FACILITIES FOR EDUCATION BY WORK AND EDUCATION BY PLAY AS ARE NOW PROVIDED FOR EDUCATION BY STUDY

M. G. BRUMBAUGH, SUPERINTENDENT OF SCHOOLS, PHILADELPHIA, PA.

(Abstract)

I am constrained to present to you as an introductory thought a general statement of the educational outlook today.

The educational mind never sleeps. Year by year it works over its formerly accepted guidance and recasts it. Year by year it reaches out and up for new activities and wider functions. The entire educational world is in constant flux. No traditional processes escape the challenge of honest inquiry. No school law or procedure is so sacred that it is not subjected to new tests and forced to justify itself in the light of changing social, economic, and ethical order. This is a sign of life, and not of decay; of hope and not of despair; of progress, and not of stagnation. The thing we call education today is a vastly different thing from the concept of a generation ago.

New influences of moment are likely to arise at any time and among any people. There is no zone of exclusive educational propaganda. The world of civilized men is the schoolmaster's workshop. The reporter of educational activities must sit with clear vision and open mind within the educational watch-tower and view impartially the passing pageant. He will see much that is ordinary and commonplace, traditional and unworthy; but he will see here and there the unmistakable signs of activities that hold in their compass rich promise of hope and help to childhood. These he seizes upon, analyzes them, relates them to accepted practice, squares them against great guiding laws, and indicates but does not seek to vindicate their right to be. He wisely submits his evidence to the great jury of thoughtful educators and the still greater jury of human adjustment.

This seems to be the present status of our educational polity. We are asked by the theme under discussion to broaden the day's activities to include not only study but also work and play. This concept of the school's function greatly broadens the activities of our present-day schools, but it likewise demands a new understanding of the place of education in the life of the individual. This is especially true in great urban centers where, by the refinements of industry and the restriction of free activity, such a type of training is essential to the welfare of the individual.

In one city with which I am familiar, I found that the wise propaganda is the direct appeal to the people. Some years ago the superintendent called to his assistance a group of unselfish and capable citizens to consider the importance of providing play and recreation for the children of the city. In four years this propaganda secured above twenty playgrounds, maintained summer camps, secured from councils funds for a commission to study and report upon needed play provisions for the city, had an act passed by the assembly creating a board of recreation, and influenced the city government to make provision in its loan items, to the amount of a quarter of a million of dollars, for play activities. Today this city is well on the way to as ample provision for play as it has for study. All this was done by appealing directly to the people, and the people demanded and secured the splendid results indicated.

I take it that some such propaganda for industrial training in the schools will produce equally desired results. In Philadelphia we now have such provision for about 70 per cent of our pupils thruout the elementary grades. That the trend of educational thought is in this direction seems obvious to anyone conversant with world-activities in education.

If one were to indicate a movement more radically different and yet more largely promising than another, it is the general movement that in one form or another endeavors to make the school an opportunity not only to study but also to work and to play. The purpose of this movement is to provide by study the essential tools of thought and of expression, and by work and by play to relate the individual definitely with the recreational activities of maturity. The vocational propaganda has achieved substantial recognition. The recreational activity, deep fraught with moral purpose, is steadily sweeping forward. It is just as essential to a stable social order that the individual should know how to spend his recreational hours as it is to spend his vocational hours. The worker is a supporter in most desirable ways of the social order. The idler is a consumer of the social good and a menace, if not a grievous burden, to the social order. In viewing these movements the thoughtful mind will pause long and consider well.

It may be that these activities will speedily bring to pass such cordial understanding of the newer functions of the school as to contribute in no small way to the solution of the mightiest problem of man—the problem of imparting to his followers in the procession of men all that has been bound up and labeled as race culture and knowledge; and at the same time so interrelating this individual to his entire environment and to his inevitable destiny as to make him a worker for his country, a lover of his kind, a reverent believer in his God.

ROUND TABLE OF SUPERINTENDENTS OF SMALLER CITIES

THE SCIENTIFIC STUDY OF ARITHMETIC WORK IN SCHOOL

J. T. GILES, SUPERINTENDENT OF SCHOOLS, MARION, IND.

The subject of arithmetic work in school has for many years been a battle-ground of opinions. Both the content and the current methods of teaching have been assailed and defended by layman and professional alike. Traditional and authoritative methods and courses of study have been supported by the stand-patters, while faddists and progressives have sought to modify the old or to replace it with new methods and revised curricula. "What shall be taught in arithmetic?" and "How?" are the questions over which the opposing forces have contended. Recently, however, another question has presented itself and has somewhat superseded the others in importance. This question is, "How well are we doing what we profess to do in our printed courses of study?" It is in the solution of these problems that we are now invoking the aid of scientific study as opposed to the rule of authority and opinion.

The final answer to the first of these questions, that of the content of the curriculum, must be sought in the light of the social demand on the school. Society, in whose interest the school is established, is concerned only with the product and not with the processes of education. In arithmetic this demand is mainly a fourfold one. The first thing asked of the school is that every pupil leaving it shall have a certain fund of knowledge—a store of mathematical facts at his command for use in the ordinary affairs of life. Second is desired a moderate degree of skill in the manipulation of these facts—certain habits involving speed and accuracy in a few processes regarded as essential in the life of every helpful member of the community. The third factor of this product is the ability to reason in mathematical terms—to solve the simple problems of ordinary business and professional life involving numerical relations. The fourth factor is more inclusive and more indefinite. It may be expressed as attitude or interest. It has to do with the functioning in life of the habits and tastes supposed to be inculcated by the study of arithmetic.

It is the business of the school first to ascertain the nature and extent of this fourfold social demand and then to produce it as definitely and with as little waste as possible.

As stated above, the content of school arithmetic cannot be determined by the school tself on a-priori grounds, but it must respond to the demands of other social institutions—of the home and of business in particular. This is a slow, self-regulating process, depending much on the locality and the character of the society. Efficiency, however, is wholly within the control of the school, and since the test of method rests in its efficiency, it is with the latter that we are chiefly concerned. The real problem of the school so far as arithmetic work is concerned is to produce with as little waste as possible the changes in the child mind demanded by society.

The factors in this process may also be regarded as four in number, involving (1) the pupil, (2) the teacher, (3) school administration, and (4) outside influences. Each of these is a variable made up in turn of other variable factors. Pupils may differ as to age, sex, native capacity, and previous training. Teachers vary in training and inherited qualities. Administration embraces course of study, supervision, classroom conditions, time allotment, imposed methods, textbooks, etc. The influence of the home and the playground, or the lack of one, is also unknown. Since each of these factors in the process exerts more or less influence on the final product, it is desirable to know as far as possible the effect of varying each of them that is within the control of the school.

It is here that opinion has held sway with the effect that no two schools exhibit the same combination of factors. Until we have a standardized product, however, by which we may measure the efficiency of each system, we must still remain at the mercy of opinion, tradition, and authority.

It is the work of science to create such a standard measure that any teacher or supervisor, by the observance of certain necessary conditions, may easily compare one school with any other school, or with an average attainment in many schools.

A long start has already been made in this direction. Promotion from grade to grade is usually based on the first of the product factors named above, i.e., a knowledge of arithmetical facts. The other three factors have been largely neglected by the teacher. The proposed scientific standard involves two other factors, skill and reasoning power. Attitude, interest, and social functioning cannot be scientifically measured.

The pioneer investigation in this field was made by Rice. His test included the scoring of papers from about six thousand children from seventeen schools of seven cities. From this investigation, he attempted to evaluate twelve possible factors as to their influence in producing arithmetical abilities. Altho his methods have since been improved upon and altho some of his conclusions were not warranted by the facts presented, Dr. Rice deserves great credit for devising and carrying out with much labor and expense this now famous investigation.

In 1908 Stone tested twenty-six school systems in the 6A grade. He attempted to measure (1) the abilities of the children of this grade by two sets of exercises, one involving the fundamental operations, the other composed of reasoning problems, (2) the time cost, and (3) the comparative excellence of the courses of study used in producing these abilities.

Since this test applies only to pupils of the upper half of the sixth grade, it is of limited usefulness. Its value to teachers lies largely in the refinements of method in giving the test and the precautions against erroneous conclusions in the interpretation of results.

Courtis has more recently devised a series of tests to measure abilities in fundamental operations and reasoning thruout the school from the third grade up. The conditions under which these tests are given insure a very accurate result, when the directions are carefully followed. The objections to this test are (1) that it is too expensive to be used often and (2) that it requires considerable expert knowledge for the manipulation and interpretation of results.

As a further modification of the three tests just mentioned, using what has seemed most valuable in their methods, I desire to propose briefly a formula by which any teacher may at any time measure, within reasonable limits, the ability of any school or pupil *in* the fundamentals of arithmetic and in reasoning power with abstract numbers. The co-operation of a number of superintendents would be necessary to make such a formula valuable for comparison of different schools of the same grade. The object of the formula is to determine the average rate per minute of attempts and the average percentage of accuracy, together with a measure of the variation in the various fundamental operations and in reasoning.

The conditions under which the proposed tests are to be given are as follows:

1. Time for each test, from four to eight minutes.
2. The tests are to be previously written on the blackboard, plainly, in a good light, and covered by a screen or curtain until the tests begin.
3. The tests are to be arranged in rows and columns, each row containing ten problems and a sufficient number of rows given to supply more problems than can be worked by any pupil in the time allowed.
4. Pupils write on papers previously prepared in cross-sections ten wide to correspond with the arrangement of problems on the board.
5. All pupils to begin writing, giving answers only, as soon as the curtain is drawn and continue until curtain falls.
6. The numbers composing the test to be drawn by the teacher by lot in the following manner: Fifty strips of paper are prepared of uniform size, on each of which is written at regular intervals the natural series of digits omitting 0 and 1. These strips are then cut into pieces of uniform size, each piece containing a digit of the series 2–9. These digits are then placed in a bag and drawn out one by one, as needed in formulating the test. This arrangement insures an equal number of each of the digits to draw from. Zero and 1 are omitted to avoid the possibility of chance combinations of exceptional ease of solution. Tests four minutes long and over, formed in this way, would vary but slightly in the degree of difficulty.
7. Where a chance drawing would result in an absurdity, as in the subtraction of a larger from a smaller number, the order of the last two digits drawn should be reversed.
8. The operation to be tested in each exercise is to be explained to the class by the teacher before drawing the curtain. It should also be written above the test as well as indicated by placing the digits in the positions usually adopted for performing the various operations, i.e., one above the other, with a line below in addition, subtraction, and multiplication and the usual arrangement for short division, omitting all the operation signs +, −, ×, ÷.
9. Pupils may grade and mark their own papers, which should be checked later by the teacher. From these marks the average or median accomplishment of the school can be quickly obtained and a measure of the variation easily derived.

The subject-matter of the proposed tests is as follows:

(1) Addition in single combinations, also double column with two figures in column.

(2) The same arrangement for subtraction.

(3) Multiplication in which both factors are single digits, also when the multiplicand is composed of two digits.

(4) Short division in which the divisor is a single digit and the dividend two, also with three digits in the dividend.

The reasoning tests include (1) three-quantity one-step abstract problems and (2) four-quantity two-step problems.

The formulae may be expressed by letters which are to be replaced with the digits drawn from the bag. Two letters written together mean a number of two digits, not multiplication as in algebra.

For addition we have:

Find the sum:

$$\begin{array}{c} a \\ \underline{b} \end{array} \quad \begin{array}{c} c \\ \underline{d} \end{array} \quad \begin{array}{c} e \\ \underline{f} \end{array} \quad \begin{array}{c} g \\ \underline{h} \end{array} \text{, etc.}$$

Also,

$$\begin{array}{c} ab \\ \underline{cd} \end{array} \quad \begin{array}{c} ef \\ \underline{gh} \end{array} \quad \begin{array}{c} ij \\ \underline{kl} \end{array} \text{, etc.}$$

For subtraction:

Find the difference:

$$\begin{array}{c} a \\ \underline{b} \end{array} \quad \begin{array}{c} c \\ \underline{d} \end{array} \quad \begin{array}{c} e \\ \underline{f} \end{array} \quad \begin{array}{c} g \\ \underline{h} \end{array} \quad \begin{array}{c} i \\ \underline{j} \end{array} \text{, etc.}$$

$$\begin{array}{c} ab \\ \underline{cd} \end{array} \quad \begin{array}{c} ef \\ \underline{gh} \end{array} \quad \begin{array}{c} ij \\ \underline{kl} \end{array} \text{, etc.}$$

Multiplication:

Write products:

$$\begin{array}{c} a \\ \underline{b} \end{array} \quad \begin{array}{c} c \\ \underline{d} \end{array} \quad \begin{array}{c} e \\ \underline{f} \end{array} \quad \begin{array}{c} g \\ \underline{h} \end{array} \text{, etc.}$$

$$\begin{array}{r} ab \\ \underline{c} \end{array} \quad \begin{array}{r} de \\ \underline{f} \end{array} \quad \begin{array}{r} gh \\ \underline{i} \end{array} \text{, etc.}$$

Division:

$$a)\underline{bc} \quad d)\underline{ef} \quad g)\underline{hi} \text{, etc.}$$

$$a)\underline{bcd} \quad e)\underline{fgh} \quad i)\underline{jkl} \text{, etc.}$$

One-step reasoning formulae:

$$a+b=c \qquad a\times b=c \qquad a\div b=c$$

from which are derived the following problems:

Indicate by the abbreviation add, sub., mul., or div. the operation to be performed in the two given numbers to get the required one.

(1) The sum of two numbers is *a*, one is *b*, what is the other?
(2) The difference of two numbers is *a*, one is *b*, what is the other?
(3) The product of two numbers is *a*, one is *b*, what is the other?
(4) The quotient of two numbers is *a*, one is *b*, what is the other?
(5) What number added to *b* gives *c*?
(6) What number subtracted from *b* gives *c*?
(7) What number multiplied by *b* gives *c*?
(8) What number divided by *b* gives *c*?
(9) *a* added to what number gives *c*?
(10) *a* subtracted from what number gives *c*?
(11) *a* multiplied by what number gives *c*?
(12) *a* divided by what number gives *c*?
(13) *a* is *b* more than what number?
(14) *a* is *b* less than what number?

(15) a is b times what number?
(16) a is b divided by what number?

The problems in the two-step reasoning test are derived from the formulae:

$$a+b=c+d$$
$$ab=cd$$
$$(a+b)=cd$$

(1) What number added to a is equal to the sum of c and d?
(2) What number subtracted from a is equal to the sum of c and d?
(3) What number added to a is equal to the difference of c and d?
(4) What number subtracted from a is equal to the difference of c and d?
(5) What number multiplied by a is equal to the product of c and d?
(6) What number multiplied by a is equal to the sum of c and d?
(7) What number multiplied by a is equal to the difference of c and d?
(8) What number added to a is equal to the product of c and d?
(9) What number subtracted from a is equal to the product of c and d?
(10) What number multiplied by the sum of a and b equals c?
(11) What number multiplied by the difference of a and b equals c?
(12) What number divided into the sum of a and b equals c?
(13) What number divided into the difference of a and b equals c?

The order in which the reasoning problems are given is also to be determined by lot, two or more sets being used if necessary to provide sufficient problems for the time allowed.

Problems formed from these formulae by chance drawing and given to classes under the uniform conditions named above are open to the criticism that the results obtained from them are only approximate. It is the belief of the author of this paper that they would be sufficiently accurate for the purpose in hand and that they would have the tremendous advantage of easy availability and of universal application. The schools as well as other business institutions must submit to the test for efficiency.

In the hope that such formulae as these proposed will enable us to determine in larger degree what is useful and what is waste in the process of teaching arithmetic, they are here offered for your consideration and for your criticism. Opinions no longer carry authority. Scientific methods of study alone command respect and the time for exact experimental investigation of our educational problems is at hand.

UTILIZATION OF THE SCHOOL PLANT

WILLIAM A. WIRT, SUPERINTENDENT OF SCHOOLS, GARY, IND.

The school idea which I present is not unique and it is not revolutionary. We are trying to put into practice only those things urged for a generation by our recognized educational leaders. In fact, we are extremely conservative and do not wish to take any chances with undigested educational philosophy. The idea that we need an enlarged school to meet the educational needs of the twentieth century is not new. We are agreed that the twentieth-century school must educate for citizenship and character, must develop individuality and efficiency, must develop the power of reflective thinking, form habits of application, and somehow get the child to find pleasure and joy in constructive effort. We are also agreed, I think, that such an education is possible only by giving the child the freedom of self-activity. We are also agreed that the civic care of the child in the twentieth century must include satisfactory public facilities for amusement, play, and work, as well as study.

Personally, I am certain of one thing. We have not realized in Gary the ideal school of the twentieth century. But we are indeed glad to be in a position where we can help in the solution of this problem.

Limited financial resources and a tremendous annual increase in the school population have forced us to attempt an enlarged school activity and at the same time consider the taxpayer. We do not wish to increase our school expenditures, but we do try to get more for our money.

The twentieth-century public school saves the taxpayers money by providing, first, classrooms and libraries where the child can study books and recite from books; second, playgrounds, gymnasiums, and swimming-pools where the child can play and secure a general physical training; third, shops, gardens, drawing-rooms, and laboratories where the child can work and learn to do efficiently many things by doing them; fourth, an auditorium where by lectures, recitals, dramatization, phonograph, player-piano, stereopticon lantern, and motion pictures the visual and auditory education of the child may be done efficiently. Four separate and distinct places are provided for each child, but the total per-capita cost is not increased fourfold. The per-capita cost for classroom study under good conditions is from $100 to $200, for play and physical training from $10 to $25, for work from $20 to $125, for an auditorium from $10 to $25. The total per-capita cost for the four departments is from $140 to $400, or from 40 per cent to 100 per cent greater than the per-capita cost for the study and recitation room alone.

But each child can be in only one of the four places at the same time. The new school so arranges the classes that different sets of children are in the four separate departments all of the time. By this plan the new school accommodates four times as many children, and at a per-capita cost of $35 to $100. By providing facilities for the child's play, work, and recreation as well as facilities for study the per-capita cost of the school plant is only 35 per cent to 50 per cent that of the traditional study classroom school. There is a corresponding saving in annual maintenance cost. Extra teachers and special supervisors are also eliminated, and the per-capita cost for instruction is less than in the exclusive study school.

A much more important feature of the new school is that the children want to go to such a school every day in the year and eight to ten hours each day. The universal problem of keeping the children in school has been solved. The school provides a real life so that the child wants to educate himself at the very moment that he has the opportunity. The play impulse is transformed into a work impulse so that real pleasure is experienced in work. The school life creates a need and desire for the academic and cultural work of the school. There is no attempt to remove the difficulties. The supposed distasteful work of the school is not sugar coated with sentimentalism. The wasted time and the misdirected energy of the street and alley are utilized to awaken ambition, develop initiative, and create power in the child, so that he can find real joy in the mastery of difficulties. The child is busily and actively engaged the year round educating himself.

The worst possible form of an educational plant is a massive brick and stone building with every device perfected for keeping children quiet in a straight-jacket school seat all day long. Children are annihilated in such a school, not educated. The traditional classroom study-school building may answer very well for the mechanical study of textbooks. But real education demands much more than the formal study of textbooks. The new school gives the child one-fourth of his time for the formal study of textbooks and for the formal organization of what he has learned during the remaining three-fourths of his time in real activities. The addition of facilities for real activities in a combined workshop, playground, and school makes real, genuine education possible. The new school does not dispense with books or culture. It provides for a more efficient use of books and a more genuine and thoro acquisition of culture.

When the child is interested in the work and activities of the school, when the child has developed the power of application and concentration, when the child is in a condition where he is capable and anxious to put forth tremendous effort to master the difficulties of the school, then it is easy and natural for the time and energy of both teacher and pupil to be used efficiently.

Eliminate the plan of teachers trying to teach things that they do not know by means of special supervisors. Permit teachers to teach only the things that they do know and know how to teach. Arrange the size of the classes so that with classes numbering four students or four hundred they are the best possible groups for the work in hand.

Break up the rigid grouping of children in fixed classes. Any child should secure as much time as he needs in any subject or department. If the child is weak physically and cannot undertake for the present formal textbook work, he should use the other facilities of the school as a sanitarium for the recovery of his physical strength. If the child is deficient in percentage because of lack of preparation in common fractions and decimals, he should not be flunked and kept repeating work in percentage. He should go on with his work in the class in percentage and in place of some of the recreation features of the school take extra work in a class several grades below where he can get directly the needed drill in common fractions and decimals. The same principle can be applied in all subjects and for pupils who wish to advance more rapidly as well as for those who wish to make up deficiencies. The retarded, subnormal, and abnormal child can be accommodated without extra teachers or facilities.

Use the great outdoors. Use classrooms, laboratories, shops, auditoriums, gardens, playgrounds, gymnasiums, textbooks, library books, real objects, real activities and occupations; but use each only for that educational purpose for which it is best adapted.

Every part of the school plant can be made an educational opportunity. There is no reason why the school furniture and much of the equipment cannot be made in school cabinet shops under the direction of a cabinet-maker selected for his teaching ability as well as his mechanical skill. There is no reason why the school painting, stage scenery, plumbing, electrical work, carpentry, printing and bookbinding, forging, foundry and machine work cannot be done in the same way. There is no reason why the school engineer should not be selected because of his teaching ability as well as his mechanical skill. The boys can work with this engineer as apprentices during certain hours in the day and learn to fire boilers, operate pumps, engines, generators, motors, heating and ventilating machinery. There is no reason why some of the nature-study teachers should not be selected because of their practical knowledge and skill as well as for their college degrees. A practical landscape gardener can take complete charge of the school garden, lawns, shrubbery, and trees, and the children will be delighted to assist him. Even the stairways and school corridors provide the highest possible educational opportunity, if we will but use them.

The twentieth-century school does the work of the public library and public playground much more efficiently and much more economically.

The school employs specially trained teachers to direct the outside reading of children and cultivate an appreciation for good literature. These teachers meet every child for a thirty-minute period on alternate days. By means of stories and reading from sets of books furnished by the public library, the children are interested in the best literature. This literature teacher's classroom is in reality a library of literature for children, and the teacher is in the truest sense a children's librarian. Many of the books furnished by the public library are supplied in sets of thirty or forty volumes of the same book so that classwork is possible in this directed reading.

Similarly the nature-study teachers have a nature-study library in their laboratory, the music teachers have a music library, the drawing teachers have an art library, etc. The library work is supplemented by pictures, victrolas, piano-players, stereopticon and motion-picture machines in the school auditorium; and by the museum specimens in school corridors. Every child is reached regularly in an organized way. The library maintenance and salary cost per book circulated and read is about one-fourth of one cent, only 5 per cent of said cost in public libraries. The life of a book circulated in sets under the direct control of the special teachers is ten times that of the usual library circulating book.

In Gary it is hoped to have a branch of the public library in every school, with an assistant librarian from the public library in charge, and with the special teachers in the school co-operating in cultivating and directing the reading of the children.

The unit school plant will accommodate about 2,700 children. The buildings are open evenings, Saturdays, and vacations. Adults use the school buildings as freely as children. The branch library is so placed that it can be entered directly from the outside and without climbing steps. The location of the branch library in the same building with the social, recreation, and study facilities brings to the library many readers who would not otherwise form the library habit. In turn the library helps to promote the other social, recreation, and study features of the school.

The opinion is becoming fixed that we have not utilized the school plants completely unless they are used for recreation and social centers by adults. Fortunately a school plant that provides for the constructive play and recreation activities of children is also most admirably adapted for similar activities with adults. The playgrounds, gymnasiums, swimming-pools, auditorium, club and social rooms, library, shops, laboratories, etc., make a complete social and recreation center for adults. Experience has demonstrated that the facilities for academic instruction add to the attractiveness of the plant as a social and recreation center.

Compared with the cost of such facilities and their use when separated from the school plant, the economy in favor of the combined playground, workshop, and school is indeed surprising. The city of Chicago has a most elaborate system of recreation parks and field houses. Selecting the eleven most successful parks of the South Park Commission, we may compare the total cost and use of the eleven parks with the cost and use of one Gary school plant. Note that the attendance of the parks is the total, not the average for the eleven parks. Also note that the cost of the school includes the furnishing of complete school facilities for 2,700 children, in addition to the social and recreation features.

	Total for Eleven Parks	One School
Population	800,000	20,000
First cost, less land	$2,000,000	$300,000
Annual maintenance	$440,000	$100,000
Annual attendance—		
Indoor gymnasium	310,000	1,000,000
Shower baths	1,385,000	500,000
Outdoor gymnasium	2,000,000	2,000,000
Swimming-pool	725,000	300,000
Assembly halls	270,000	1,000,000
Clubrooms	70,000	50,000
Reading-rooms	600,000	1,000,000
Lunch-rooms	520,000	20,000

The twentieth-century school is planned to secure the highest possible efficiency from buildings, grounds, and equipment, and the time and energy of teachers and pupils. It gives the child not a shop, not a playground, but a life.

DISCUSSION

Harlan Updegraff, Bureau of Education, Washington, D.C.—Educational administration in many of our cities has these three characteristics: (1) the scope of the public schools is gradually extending; (2) increased expenses have accompanied this expansion; (3) the tax rates and the bonded indebtedness are approaching their legal maximum.

Under such conditions any system of school organization that gives increased school facilities without increasing the tax rate is bound to receive careful consideration. The public schools of Gary, Ind., seem to meet this condition. By the utilization of all parts of its buildings and by lengthening the school day to six and six and one-half hours, two sets of pupils are accommodated in the same school plant in which under the ordinary system but one set of pupils could be housed. At the same time the course of study has been extended to cover manual training, domestic science, and laboratory work in the sciences. The entire subject-matter of the course of study has been considerably enriched. More important than this, thru the use of the school building and the playground as a social center, the leisure time of the pupils is spent upon the school premises in wholesome work and play. In this latter phase of the work gymnasiums and swimming-pools, which, together with the playgrounds, are placed under skilled directors, have been exceedingly helpful. Another important feature is the use of the school building before and after hours of the day school for evening schools, for Saturday classes, and for vacation schools. Practically all parts of the building are in use most of the time.

The success with which the plan has met in Gary is sufficient to warrant its trial in other cities where conditions are favorable. It should be observed, however, that it is necessary, in the first place, that the hours of the school day be lengthened, and, secondly, that the buildings now in use be so constructed that the basement, hall, and attic space may be transformed into workshops, laboratories, and gymnasiums.

JAMES G. RIGGS, State Normal School, Oswego, N.Y.—Less than a half-century ago the schoolhouse at the cross-roads or in the small village in a farming section answered many more purposes than our present buildings. Besides the six or seven months' school there was the winter singing-school, the occasional writing-school, the spelling-bee with its excitement, possibly a debate with neighboring champions, a temperance lecture, a play on a rural subject in native setting, preaching on alternate Sundays, rarely a funeral but always a meeting-place for young and old, and always a chance for the beginnings of courting and mating for all the countryside. The building paid for by public tax was used for community purposes. It was the educational and social center for the locality. The result was a general acquaintance thruout the whole region among a homogeneous people, together with an exchange of friendship, of views, of goods, and of intellectual stimulus The social results were large. No bad feeling could long endure among people who met so often in so many interests. They were interdependent and self-respecting.

From scenes like these thruout the eastern and middle states went young men with their wives to the westward to help develop this great land and show the East how to do things, as at Gary. Communities are few now which hold the same traditions, religion, and ideals. Various foreign types, tongues, and ways have come in almost in a night, and no provision has been made for them aside from the common school. Even the churches have not gone forward to greet them, to make them feel at home in a new land. Of all people we need to preserve the original democratic social ideals of the communities described and to provide for the interests of those who have so many common needs as strangers—chief among them the need of understanding one another and the ideals inherent in their adopted country.

There can be no return to the spontaneous gatherings at the cross-roads. The telephone, the rural delivery, and the automobile have put an end to those conditions, but have not filled the place of those face-to-face meetings of one friend with another. Nor will our cosmopolitan population take the lead themselves in setting a common meeting-place for common purposes.

It is therefore the duty of the authorities to take the natural means at hand and make them available for community purposes. Some cities and larger towns have already seen their opportunity and have established the school as a center for various activities which appeal to the newcomer, as the following: school grounds fitted for sports for all, evening instruction in sewing, dressmaking, cooking, English in its spoken and written forms, manual training, music, folk-dancing and ordinary dancing, and gymnasium work. Rooms are provided for a library, quiet games, song recitals and lectures, clubs, moving pictures, and, in some cases, bathing facilities. No better service can be given than to spend a series of evenings during the winter on such a program as this:

The Mayor of the city on "My Office and Its Duties."
The City Chamberlain on "City Funds, How Obtained and How Disbursed."
The City Assessor on "How Values Are Set, with Examples."
The Superintendent of Public Works on "Public Property and Its Care."
The City Judge on "Our City Court and Its Work."
The Police and the Fire Departments.
The Child in the City, and His Education.

Such a program or a modification of it is good not only for the adults who are new to our land, but for natives and for the officials themselves who are in office. It is the best kind of a report to the people, and may well be likened to the initiative and the referendum. The program should be directed by public officials and provided for in the regular budget where expense is incurred. The programs find their justification in the fact that they are educational; even the games and sports, inasmuch as they are orderly and directed. They are the only foil to the saloon and the dance hall with their unwholesome surroundings. They furnish a meeting-place and recreation for those whose rooms or houses are not homes in the proper sense, and they afford an extension of the function of the school to those adults who otherwise would be shut out of many advantages of this new world. Here they may talk over community interests, local improvements, needed reforms, and thus become responsible citizens. When they meet regularly they are likely to think alike and when occasion arises they are likely to act alike and for the common good. Under cordial and sympathetic treatment from native stock the foreigner becomes happily adjusted to the new conditions, and his children may easily become masters in the next generation. Democracy has its best training here among those of foreign birth, and they are wise officials who see the opportunity and embrace it. Ideals are being formed and futures shaped under such conditions where the more favored are, in Browning's phrase, willing "to lend themselves out."

The school authorities should be the active parties in initiating and controlling such use of the school plant, as here dangers may creep in. Matters controversial in politics, religion, or social conditions must be avoided. The object is to harmonize and unify interests, not to set passions astir nor engender strife. Whatever has not the approval of the whole community will be short lived and will react. On the other hand, whatever benefit and uplift come from the use of the school building will so justify the expense that once begun the custom will be permanent.

Such a plan will react on the scholastic work of the school by putting a new and real interest into the work of the day. The building should be so planned, seated, and equipped that it will serve not only the purposes of the five-hour school, but of all the evening activities. Instead of all education centering about the child, his parents are included too, and the authorities will find the added element making the solution of the problem easier because they are helping to solve it.

In a word, the increased use of the school plant for community activities is the recognition of a human need and the effort to supply that need.

SUPPLEMENTARY LIST OF ACTIVE MEMBERS

ENROLLED SINCE THE PUBLICATION OF THE YEARBOOK FOR 1911–12,
DECEMBER 1, 1911

ALABAMA

1911 Lee Byrne.
1911, Principal of High School; 251 St. Joseph St., Mobile.

Robert Franklin Cooper, A.B., '02, A.M., '04, Washington and Lee Univ.; Ph.D., '08, Johns Hopkins Univ.
1911, Professor of Secondary Education, University of Alabama, University P.O.

Carroll H. Florey, A.B., '87, Harvard Coll., Ala.
Superintendent of Schools, Vincent.

1912 Walter S. Buchanan, B.A.S., '07, Harvard Coll.; A.M., '11, Selma Univ.
President, Agricultural and Mechanical College for Negroes, Normal.

ARKANSAS

1911 Dudley T. Rogers.
1893, Superintendent of Schools; 1225 Main St., Jonesboro.

Frank S. Root.
1908, Superintendent of Schools, Fayetteville.

Norman M. Whaley, Ph.B., '00, Hendrix Coll.
1911, Superintendent of Schools, Camden.

Edgar Williams.
Superintendent of Schools; 907 West Walnut St., Blytheville.

Mrs. Edgar Williams.
1907, Principal of High School; 907 West Walnut St., Blytheville.

1912 W. S. Johnson, A.B., '90; A.M., '93; Ph.D., '99.
Professor of Philosophy and Pedagogy, University of Arkansas; 346 Arkansas Ave., Fayetteville.

CALIFORNIA

INSTITUTIONS

1911 Long Beach Public Library.
Chief Executive Officer, Ira B. Hatch, City Hall; Librarian, Victoria Ellis, Pacific Park, Long Beach.

COLORADO

1911 S. M. Andrews, B.Sc., '04, Valparaiso Univ.
Superintendent of Huerfano County High School, Walsenburg.

Sylvester Harrison Hall, A.B., '00, Indiana Univ.
1911, Superintendent of Schools, 415 Lake St., Fort Morgan.

Anna Louise Johnson.
1911, Secretary, Playground Commission; 1424 Williams St., Denver.

Grace Ellen Shoe, A.B., Antioch Coll.; A.M., Univ. of Denver.
1900, Teacher of Mathematics, North Denver High School; 1130 York St., Denver.

CONNECTICUT

1911 Mrs. Lucretia A. Cummings, A.B., '74, Vassar Coll.
1899, Secretary, Town School Committee, Southington; res., Plantsville.

DISTRICT OF COLUMBIA

1911 Frederick K. Noyes, A.B., '07, Yale Univ.
1911, Assistant Editor, United States Bureau of Education; 3019, 13th St., N.W., Washington.

FLORIDA

1911 I. I. Himes.
Superintendent of Schools, West Palm Beach.

H. W. Lewis.
1910, Superintendent of Public Instruction, Palm Beach County, West Palm Beach.

John A. Thackston, Ph. D., '08, N.Y. Univ.
State High School Inspector and Head of Department of Education, University of Florida, Gainesville.

INSTITUTIONS

1911 Public Library, Jacksonville.
Librarian, Joseph L. Wheeler, Jacksonville.

GEORGIA

1907 **Jere M. Pound.**
President, Gordon Institute, Barnesville.

1911 **Charles Goodman.**
Manager, Milton Bradley Co., 29 S. Broad St., Atlanta.

ILLINOIS

1901 **Samuel J. Ferguson.**
1898, Superintendent of Rock Island County Schools; 1030, 22d St., Rock Island.

1908 **Benjamin B. James**, A.M., '83.
1906, Professor of Physics, James Millikin University; 1398 West Wood St., Decatur.

1911 **Myron Lucius Ashley**, Ph.B., '94, Ph.M., '95, Northwestern Univ.; A.M., '00, Harvard Univ.; Ph.D., Univ. of Chicago.
1905, Head of Department of Psychology, Chicago Teachers College; 7113 Normal Ave., Chicago.

Otto M. Becker.
Principal of May School, Chicago; res., 3540 Harold Ave., Berwyn.

Benjamin L. Birkbeck.
1910, Superintendent of Jo Daviess County Schools; 120 Meeker St., Galena.

A. M. Blood.
1906, Superintendent of Schools, Park Ridge.

James Henry Browning, L.I., '92; A.B., '93.
1908, Superintendent of Schools, Spring Valley.

George L. Buck.
With Silver, Burdett & Co., 623 S. Wabash Ave., Chicago.

W. W. Coultas.
1906, Superintendent of DeKalb County Schools; 503 S. Main St., Sycamore.

James J. Crosby.
1904, Superintendent of Schools, Pekin.

Louis Carson Dillman, A.B., '04, Yale Univ.
With American Book Co., 1104 S. Wabash Ave., Chicago.

Carleton E. Douglass, A.M., '97, Central Univ. of Iowa; Ph.B., '99, Univ. of Chicago.
1912, Superintendent of West Side Schools; 267 Walnut St., Aurora.

Lura Mary Eyestone, B.Sc., Tchrs. Coll., New York.
1901, Training Teacher, Illinois State Normal University; 412 W. Mulberry St., Normal.

Benjamin G. Hess, M.Didac., B.Sc., '00, Ill. St. Nor. Sch.
1909, Superintendent of Schools; 3019 Gilboa St., Zion City.

Charles H. Maxson, A.B., '92, Univ. of Wisc.
1911, Superintendent of Schools, Library Bldg., Moline.

James B. McMann.
Superintendent of Schools; 638 Goodney St., LaSalle.

James Gregory Moore.
1911, Superintendent of Schools; 719 S. Monroe St., Streator.

Mrs. H. T. Morrison.
1911, Member, Board of Education; Logan Place, Springfield.

A. L. Odenweller.
1910, County Superintendent of Schools, Cambridge.

Dwight H. Perkins.
Architect, Specializing in Designing Schools, Room 1100, 6 N. Clark St., Chicago.

Benjamin L. Pilcher, A. B., '07, Univ. of Chicago.
Principal of Drummer Township High School, Gibson City.

Ora Anson Rawlins, A.B., A.M., Indiana Univ.
1911, Principal of Streator Township High School; 204 N. Park St., Streator.

Charles W. Roadman, M.Didac., Iowa St. Tchrs. Coll.
With Houghton, Mifflin Co., 623 S. Wabash Ave., Chicago.

Nathaniel Burton Sewell, A.B., '08, Yale Univ.
With Ginn & Co., Publishers, 2301 Prairie Ave., Chicago.

George W. Solomon, '07, Ill. St. Nor. Univ.
1910, Superintendent of Schools, Gillespie.

Nellie Catherine Thompson.
First Grade Critic Teacher, Illinois State Normal University; Box 453, Normal.

Karl D. Waldo, A.B., '06, Univ. of Ill.
1909, Superintendent of Schools; 129 W. Exchange St., Sycamore.

1912 **Jemima O. Brown.**
1912, Teacher in Juvenile Court School; 2736 Shields Ave., Chicago.

Genevieve Cook.
Teacher in Juvenile Court School; 3127 Washington Blvd., Chicago.

Lilla Coggeshall.
1908, Teacher in Juvenile Court School; 3927 N. Hamlin Ave., Chicago.

Mrs. Jean K. Hanna.
1902, Head Assistant, Dore School, Chicago; 305 N. East Ave., Oak Park.

Mrs. Tena Farren MacMahon.
1911, Member, Board of Education; 5112 Wabash Ave., Chicago.

Clara H. McFarlin.
1892, Principal of Fulton School; 2969 Groveland Ave., Chicago.

ILLINOIS—*Continued*

1912 Isabel McKinney.
Teacher in Juvenile Court School; 814 Ewing St., Chicago.

Clara M. Newbecker.
1903, Head Assistant, D. S. Wentworth School; 1109 E. 61st St., Chicago.

Alida H. O'Connor.
Grade Teacher, Drummond School; 1622 Adams St., Chicago.

Effie Perry.
1900, Eighth Grade Teacher, D. S. Wentworth School; 6715 Perry Ave., Chicago.

Maria E. Ramey.
1911, Teacher of Subnormal in Dore School; 324 S. Hamlin Ave., Chicago.

Emma Stevens.
1883, Teacher of Fifth Grade, Newberry School; 617 Sherman Place, Chicago.

May B. Wallace.
1889, Grammar Grade Teacher, D. S. Wentworth School; 6717 Perry Ave., Chicago.

Jane E. Williams.
1904, Teacher of Eighth Grade, Lloyd School; 4400 Jackson Blvd., Chicago.

Sara E. Wright.
1895, Head Assistant, Fulton School; 6500 Yale Ave., Chicago.

INSTITUTIONS

1911 Board of Education of the City of Chicago.
President, Dr. J. B. McFatrich; Secretary, L. E. Larson, Chicago.

1912 Chicago Principals' Club, 35 N. Dearborn St.
President, Avon S. Hall; Secretary, Mary E. Fellows, Chicago.

INDIANA

1911 Purley C. Emmons, A.B., '00, Indiana Univ.
1910, Superintendent of Schools, Kendallville.

Charles A. Greathouse.
State Superintendent of Public Instruction, Room 27, State House, Indianapolis.

Winfred W. Holliday, A.B., '03, Indiana Univ.
Superintendent of Schools, Whiting.

Nolan H. Huff, A.B., '06, Univ. of Ill.
1911, Head of English Department, High School; 1115 S. Main St., Bluffton.

Miss Cecil Inman.
1911, First Grade Teacher, Public Schools; 483 Kane Ave., Hammond.

John A. Linke, A.B., '03, A.M., '04, Indiana Univ.
1908, Superintendent of Schools, Seymour.

Marion S. Mahan, A.B., '07, Indiana Univ.
1907, Superintendent of Schools, Danville.

Edison E. Oberholtzer, A.B., '10, Univ. of Chicago.
1911, Superintendent of Schools, Clinton.

Edgar Webb.
With Thompson, Brown Co., 2219 N. Alabama St., Indianapolis.

William O. Wilson.
1905, Superintendent of Posey County Schools, Mt. Vernon.

1912 Emma Taylor, Grad., '11, St. Nor. Sch.
1902, Teacher in First Primary; 125 Manchester St., Aurora.

INSTITUTIONS

1911 City Free Library, Vincennes.
Chief Executive Officer, R. I. Hamilton, Superintendent of Schools; Librarian, Lillian Trimble, Vincennes.

Franklin College Library.
President, E. A. Hanley; Librarian, Lois A. Johnstone, Franklin.

IOWA

1911 Albert M. Deyoe, B.Sc., '87, A.M., '92, Univ. of Iowa.
1911, Superintendent of Public Instruction, State House, Des Moines.

Fred L. Mahannah, B.Sc., '98, Cornell Coll.
State Inspector of Normal Training High Schools, Des Moines.

P. R. McClenahan, M.Didac., '99, Iowa St. Tchrs. Coll.; Ph.B., '05, A.M., '06, Iowa St. Univ.
Inspector of Secondary Schools; 3736, 3d St., Des Moines.

KANSAS

1911 A. H. Bushey, A.B., St. Nor. Coll.
1903, Superintendent of Schools, Pittsburg.

J. F. Hughes, A.B., '09, Washburn Coll.
Superintendent of Schools; 413 S. Steuben St., Chanute.

James Ralph Jewell, A.B., '03, A.M., '04, Coe Coll.; Ph. D., '06, Clark Univ.
Principal of Secondary School, Kansas State Teachers College; 1521 Highland St., Emporia.

George W. Kendrick.
Superintendent of Schools, Wichita.

Frank L. Pinet.
1910, Superintendent of Schools, Parsons.

Benjamin W. Truesdell, A.B., '02, Friends Univ.
1902, Professor of Education, Friends University, North Hall, Wichita.

KENTUCKY

1911 James U. Snyder, A.B., '05, Georgetown Coll.
1910, Superintendent of Schools, Marion.

LOUISIANA

1911 Thomas Henry McGregor, A.B., '98, Univ. of Nashville.
1904, Superintendent of Richland Parish School, Rayville.

MARYLAND

1911 Heinrich Ewald Buchholz.
Editor, "Atlanta Educational Journal," 221 St. Paul St., Baltimore.

MASSACHUSETTS

1911 George I. Aldrich.
Superintendent of Schools, Brookline.

Gertrude Hartman, A.B., '05, Bryn Mawr Coll.
1911, Assistant Director, The Winsor School, Fenway Sta. P.O., Boston.

Frank V. Thompson, A.M., Harvard Univ.
1910, Assistant Superintendent of Schools, Boston; res., 84 Brooks St., Brighton.

Lucy Wheelock.
Principal of Kindergarten Training School, 134 Newbury St., Boston.

MICHIGAN

1908 Frank E. Millar, A.B., Kalamazoo Coll. and Univ. of Chicago.
1908, Superintendent of Schools, Box 126, Ludington.

1911 Leslie A. Butler, B.Pd., Mich. St. Nor. Coll.
1909, Superintendent of Schools; 321 E. Cedar St., Boyne City.

John Arnold Doelle, A.B., Univ. of Mich.
1903, Superintendent of Schools, Houghton.

Thad Johnson Knapp, Ph.B., '98, Univ. of Mich.
1911, Superintendent of Schools, Highland Park; 51 Tyler Ave., Detroit.

Edward O. Marsh, A.B., '94, Univ. of Mich.
1911, Superintendent of Schools; 774 W. Main St., Jackson.

J. F. Reed.
1910, Superintendent of Schools, Wakefield.

1912 Ransom Hazelton, A.B., '09, Univ. of Mich.
1911, Superintendent of Schools, Marine City.

INSTITUTION

1911 Department of Education and Psychology, State Normal School, Marquette.
President, James H. B. Kaye; Gilbert L. Brown, Assistant Professor of Education and Psychology, Marquette.

MINNESOTA

1911 George F. Howard.
1909, Extension Division, College of Agriculture, University of Minnesota; 1281 Raymond Ave., St. Paul.

Samuel J. Rack, B.L., Univ. of Pa.
Manager, Minneapolis Teachers Agency, and Associate Editor, "School Education"; 1015, 6th St., S.E., Minneapolis.

W. C. Smith.
General Agent, American Book Co., Box 521, Minneapolis.

MISSISSIPPI

1911 H. P. Todd.
1908, President, Stanton College for Young Ladies, Box 28, Natchez.

MISSOURI

1901 S. A. Underwood.
Principal of Westport High School, 3632 Gillham Road, Kansas City.

1911 Elizabeth Buchanan.
1885, Principal of Woodland School; 2300 Independence Ave., Kansas City.

Cora Campbell.
1903, Principal of Bancroft School; 1600 Wabash Ave., Kansas City.

Alexander Royal Coburn, A.B., Marietta Coll.; A.M., Univ. of Chicago.
1908, Superintendent of Schools, Chillicothe.

Vincil Carey Coulter, A.M., '05, Brown Univ.
1907, Head of English Department, State Normal School, Warrensburg.

John N. Crocker, Pd.B., '09, St. Nor. Sch.
1909, Principal of High School; 1711 Elm St., St. Charles.

Otto F. Dubach, Ph.B., Ottawa Univ.; Ph.M., Univ. of Chicago.
Instructor in History and Civics, Central High School, Kansas City.

Charles Mark Gill, A.B., '10, Yale Univ.
1910, Instructor in History and Geography, Harris Teachers College, Park and Theresa Ave., St. Louis.

MISSOURI—*Continued*

1911 Gertrude E. Greene.
1912, Dean of Kansas City Normal School; 3126 Olive St., Kansas City.

Frank Hamsher, A.B., '95, Univ. of Mich.
1906, Principal of Smith Academy, St. Louis.

Mrs. Marie Turner Harvey.
1910, Teacher of the Model Rural School, and Extension Worker in the Department of Rural Education, State Normal School; 1315 E. Normal Ave., Kirksville.

William Leslie Johns, B.Pd., '07, St. Nor. Sch.
Superintendent of Schools, Flat River.

Uel W. Lamkin.
1909, Superintendent of Henry County Schools, Clinton.

Harry Moore.
1910, Superintendent of Schools, Aurora.

E. H. Newcomb, B.Pd., '11, St. Nor. Sch.
1911, Superintendent of Newton County Schools, Neosho.

John F. Osborne.
Principal of George Baker Longan School, 39th and Warwick Blvd., Kansas City.

James William Pierce, B.Pd., '00, St. Nor. Sch.; B.Sc., '11, Univ. of Mo.
1911, Superintendent of Public Schools, Washington.

John H. Rabe.
1900, Principal of Arlington School; 2430 Union Blvd., St. Louis.

Paulina E. Raven, B.Sc., '05, Mich. Agri. Coll.; Grad. Student, Columbia Univ.
1911, Director of Household Arts, State Normal School, Warrensburg.

Sophia E. Richards.
1894, Principal of Yeager School; 2645 Lockridge Ave., Kansas City.

Homer L. Roberts.
1906, Professor of Biology, State Normal School; 449 N. Frederick St., Cape Girardeau.

W. C. Sebring.
With Rand, McNally & Co., 609 S. Grant St., Springfield.

William Nelson Sellman, A.B., '07, Western Md. Coll.
1911, Superintendent of Schools, DeSoto.

L. J. Sexton, A.B.
Principal of Madison School; 4571 Gibson Ave., St. Louis.

Thomas E. Spencer.
1902, Principal of Irving School; 3829 N. 25th St., St. Louis.

Henry E. Stout, A.B., '07, Central Coll.
President, Howard Payne College for Young Women, Fayette.

Fuller Swift.
1910, Principal of Arcadia Heights Schools, Arcadia.

William C. Urban, A.B., '01, Univ. of Kans.
1907, Superintendent of Schools, Cameron.

Howard A. Van Derslice.
With Joseph Dixon Crucible Co., Victoria Bldg., St. Louis.

1912 Orton C. Lynch, B.S.D., '99, Warrensburg St. Nor. Sch.
1907, Superintendent of Schools, Farmington.

B. F. Melcher, B.Pd., Warrensburg St. Nor. Sch.
1910, Superintendent of Schools, Greenfield.

William Melcher, A.B., '11, Drury Coll.
1911, Superintendent of Schools; 205 E. Main St., West Plains.

INSTITUTIONS

1911 Blees Military Academy, Macon.
Superintendent, W. A. Wilson, Macon.

The Harris Teachers College, St. Louis.
President, John W. Withers, St. Louis.

NEBRASKA

1911 Clinton M. Barr, A.B., Univ. of Nebr.
1911, Superintendent of Schools; 505 Briggs St., Hastings.

Etta Brown, M.Didac., Highland Park Coll.
1905, Superintendent of Training Department, State Normal School, 23d St. and 7th Ave., Kearney.

Gertrude L. Coon, A.B., '11, Univ. of Nebr.; B.E., '11, Peru St. Nor. Sch.
1911, Superintendent of Webster County Schools, Red Cloud.

M. E. Crosier.
1911, Superintendent of Schools; 907 Koenigstein Ave., Norfolk.

J. H. Kemp.
1909, Superintendent of Schools, Wayne.

Dorothea Kolls.
1909, County Superintendent of Schools; 1518 W. Charles St., Grand Island.

Albert Ray Lang, A.B., '09, Nebr. Wesleyan Univ.
Graduate Student, University of Nebraska; 1911 Q St., University Place, Lincoln.

Edward W. Marcellus, A.B., '09, Northwestern Univ.
1909, Superintendent of Schools, Crete.

NEBRASKA—*Continued*

1911 Elmer G. Miller.
1910, Supervisor of Writing, Public Schools; 2238 Farnam St., Omaha.

Frank S. Perdue.
With the Macmillan Co.; 1624 S. 25th St., Lincoln.

Jessie B. Pyrlte.
1909, Superintendent of Gage County Schools, Beatrice.

Wilson Tout.
1907, Superintendent of Schools, North Platte.

1912 C. E. Bensen, A.B., '11, Univ. of Nebr.
1912, Superintendent of Schools, Lexington, Station A, Lincoln.

Sutton H. Martin, A.B., '95, Univ. of Nebr.
Superintendent of City Schools, Broken Bow.

R. R. McGee, B.Ed., Peru St. Nor. Sch.; A.B., Univ. of Nebr.
1910, Superintendent of Schools, Syracuse.

NEW JERSEY

1911 George H. Eckels, A.M., '97, Gettysburg Coll.
1910, Superintendent of Schools, New Brunswick.

H. Whitford Maxson, A.B., '97, Alfred Univ.; Pd.B., '98, N.Y. St. Nor. Coll.; A.M., '02, Columbia Univ.
1910, Supervising Principal of Schools, West New York; res., 434, 21st St., Guttenberg.

Wildy Victor Singer, A.B., '03, Franklin and Marshall Coll.
1908, Superintendent of Schools, 26 Central Ave., Dover.

Zygmunt Siegfried Teymel, B.Sc., '07, Univ. of Pa.
1911, Principal of Public Schools; 804 Morgan Ave., Riverton.

NEW MEXICO

1911 William A. Poore, L.I., '07, A.B., '08.
1911, Superintendent of Schools, Carlsbad.

Alvan N. White.
1912, State Superintendent of Public Instruction, Santa Fe.

NEW YORK

1911 Charles P. Alvord.
1902, Principal of Teachers Training School, 142 Delaware Ave., Buffalo.

Elliott L. Cummings.
With Milton Bradley Co., 110 Broad St., Lyons.

W. W. Drew, A.B., '02, Colby Coll.
1906, With American Book Co., East Aurora.

Alfred P. Fletcher, A.B., '00, A.M., '01.
1911, Assistant Superintendent of Schools, 306 Municipal Bldg., Rochester.

P. C. Haessler, B.Sc., '11, Univ. of Chicago.
1911, Assistant in Chemistry, Columbia University; 304 Havemeyer St., New York.

Eugene G. Hughey.
Principal of Public School No. 52; 526 Auburn Ave., Buffalo.

George C. Lehmann, B.Sc., '95, Hobart Coll.
Assistant Secretary, Chamber of Commerce, 200 Woodward Ave., Buffalo.

Ervin E. Lewis, A.B., '07, A.M., '09, Stanford Univ.
Student, Teachers College, Columbia University, New York.

P. L. Pease.
Manager, The Waterman-Waterbury Co., 301 Elk St., Buffalo.

Orlando S. Reimold, A.B., Univ. of Mich.
With World Book Co., 12 Van Sice Ave., Yonkers.

Edward F. Southworth, A.B., '97, Harvard Univ.
With Ginn & Co., 314 Highland Ave., Syracuse.

George K. Staples, LL.B., Univ. of Buffalo.
President, Board of Aldermen; 528 Richmond Ave., Buffalo.

Ralph William Terman.
With Eagle Pencil Co., 377 Broadway, New York.

Guy Montrose Whipple, A.B., '97, Brown Univ.; Ph.D., '00, Cornell Univ.
1904, Assistant Professor of Educational Psychology, Cornell University, Ithaca.

INSTITUTIONS

1911 Teachers' Educational League, Buffalo.
President, Mary L. Morgan; Secretary, Clara M. Schorn, 171 Sixteenth St., Buffalo.

PUBLIC SCHOOLS (BOROUGH OF BROOKLYN)

1903 Public School No. 63, Hinsdale and Liberty Sts.
Principal, Honor E. Quinn.

NORTH CAROLINA

1911 Ernest J. Green, A.B., '96, Trinity Coll.
Superintendent of Schools, City High School, Morris St., Durham.

John Lory Harris, Ph.B., Univ. of N.C.
1911, Superintendent of Schools, 642 Falls Road, Rocky Mount.

Thornwell Haynes, A.B., Wofford Coll.; A. M., Vanderbilt Univ.
1911, Superintendent of Schools, High Point.

T. C. Henderson.
1905, County Superintendent of Schools, Quebec.

Samuel B. Underwood, A.B., '06, Trinity Coll.
1911, Superintendent of Schools; 406 W. Washington St., Kinston.

NORTH DAKOTA

1911 Youell Gordon Barnell, Ph.B., '09, Ellsworth Coll.
1911, Superintendent of Schools; 832 E. 7th St., Devils Lake.

Minnie Jean Nielson.
1907, Superintendent of Barnes County Schools; 901 Fifth Ave., Valley City.

Laura B. Sanderson.
1909, Superintendent of Le Moure County Schools, Le Moure.

Helen J. Sullivan, A.B., Univ. of N.Dak.
1911, Superintendent of Cavalier County Schools, Langdon.

Edwin J. Taylor, B.Sc., '90, St. Lawrence Univ.
1911, Superintendent of Public Instruction, Bismarck.

W. A. Wilkinson, B.Sc., '10, A.M., '11, Univ. of Mo.
1911, Department of Pedagogy, State Normal School, Mayville.

OHIO

1909 Theo. B. Pflueger.
1896, Principal of 20th District School; 2635 Alms Place, W.H., Cincinnati.

1911 Henry R. Dalrymple.
With American Book Co., 7 Auburn St., Columbus.

G. W. Finch, B.Sc., '98, A.B., '02, North East Ohio Coll.
Superintendent of Schools; 19 S. 8th St., Martins Ferry.

Nelson W. Frasure.
Principal of Crawfis Collegiate Institute, Lancaster; res., Amanda.

John A. Jackson, Ph.B., '11, Mt. Union Coll.
1911, Superintendent of Schools; 4256 Noble St., Bellaire.

Frank W. Miller, A.M., '96, Dartmouth Coll.
State Commissioner of Schools; 192 West 8th Ave., Columbus.

William Alfred Walls, A.B., '07, Mt. Union Coll.
1910, Superintendent of Schools, High School Bldg., Kent.

Tilden J. Williams.
Superintendent of Public Instruction, cor. Main and Findley Sts., Toronto.

OKLAHOMA

1911 Henry G. Bennett, A.B., Ouachita Coll.
1910, Superintendent of Schools, 400 Brown St., Hugo.

A. W. Duff, B.Pd., '08, Springfield St. Nor. Sch.
1908, Superintendent of Schools, 27 E. Tyler St., Mangum.

Walter H. Echols, B.Sc., Columbia (Texas) Coll.
1908, Superintendent of Schools, Durant.

William Cullen French, A.B., '02, Grayson Coll., '07, Univ. of Okla.
1910, Superintendent of Schools, Wagoner.

Walter E. Gill.
Superintendent of Osage County Schools, 522 E. Main St., Pawhuska.

Ulysses Jackson Griffith, A.B., '94, Indiana Univ.
President, Southwestern State Normal School, Weatherford.

Hiram C. King, Grad. Nor. Sch.
Superintendent of Schools, Soper.

W. G. Masterson.
Superintendent of Schools, Vinita.

Madison Love Perkins, B.L., '98, Univ. of Mo.
1908, Head of Department of Education, East Central Normal School; 423 N. Beard St., Ada.

W. W. Robertson.
With C. E. Merrill Co., 201 Scott Thompson Bldg., Oklahoma City.

Francis W. Wenner, B.Sc., Heidelberg Univ.
1911, Superintendent of Schools; 912 Keeler Ave., Bartlesville.

PENNSYLVANIA

1911 Maurice Jefferis Babb, Ph.D., Univ. of Pa.; B.Sc., Haverford Coll.
Assistant Professor of Mathematics, University of Pennsylvania; 157 Cricket Ave., Ardmore.

Alton P. Diffendafer, Grad., '89, Lock Haven Nor. Sch.
1910, Superintendent of Schools; 101 Hanover St., Nanticoke.

PENNSYLVANIA—*Continued*

1911 Carroll Downes.
With American Book Co., 1326 Arch St., Philadelphia.

Grant B. Gerberich, A.B., '00, Lebanon Valley Coll.
1908, Superintendent of Schools; 17 Rosedale Ave., Greenville.

Walter Scott Hertzog.
State High School Inspector; 2108 N. Third St., Harrisburg.

Marion Dexter Learned, Ph.D.
Professor of German, University of Pennsylvania; 229 S. 44th St., Philadelphia.

Thomas G. McCleary, A.B., '03, Univ. of Chicago.
1911, Superintendent of Schools; 39 W. Prospect Ave., Washington.

William W. Rupert, C.E., '77, Polytechnic Coll. of Pa.
1888, Superintendent of Schools; 545 N. Charlotte St., Pottstown.

William C. Sampson, Ph.B., '02, Dickinson Coll.
1911, Superintendent of Schools; 220 N. Linden St., Bethlehem.

Frank M. Snyder.
1911, President, School Board, Cresson.

A. E. Wagner, A.B., '08, Ursinus Coll.; Ph.D., '10, Univ. of Pa.
1904, Principal of Mauch Chunk Township Schools, Nesquehoning.

1912 William Hughes Mearns, A.B., '02, Harvard Univ.
Professor of English, School of Pedagogy, 111 East Mt. Airy Ave., Philadelphia.

INSTITUTIONS

1911 Carnegie Free Library, Connellsville.
Librarian, Elizabeth V. Clark, Connellsville.

SOUTH CAROLINA

1911 Frank Evans, L.I., '83, Univ. of Nashville.
1895, Superintendent of Schools; 163 N. Dean St., Spartanburg.

SOUTH DAKOTA

1911 John W. McClinton, A.B., '03, Northwestern Univ.
1911, Superintendent of Schools, Mitchell.

Zakarias J. Ordal, A.B., '98, Luther Coll.
1908, President, Lutheran Normal School; 1939 S. Summit Ave., Sioux Falls.

Theodore Saam, B.Sc., '98, Lenox Coll.; A.M., '03, Iowa State Univ.
Superintendent of Schools; 202 S. Main St., Lead.

INSTITUTION

1911 State Normal School, Springfield.
President, Gustav G. Wenzlaff, Springfield.

TENNESSEE

1911 John Willard Brister, A.B., '92; A.M., '93, Univ. of Nashville.
1911, State Superintendent of Public Instruction; 915, 5th Ave., South, Nashville.

J. A. Hargraves.
Chairman, Board of Education, Hamilton County, care of City Water Co., Chattanooga.

E. F. Hixson.
Chairman, High School Board, Hamilton County, Hixson.

Walter E. Miller, A.B., '87, Ohio Wesleyan Univ.
1911, Superintendent of Schools, Board of Education, Knoxville.

Samuel Leonard Smith.
1909, Superintendent of Schools; 522 Madison St., Clarksville.

TEXAS

1911 Edgar W. Bartholomae, A.B., '11, Univ. of Texas.
Principal of High School; 1248, 6th St., Port Arthur.

John Edward Blair, B.Sc., '87, Lebanon Univ.
1908, Superintendent of Schools, Corsicana.

J. A. Brooks.
1911, Superintendent of City Schools, High School, Dallas.

Emmett Brown, L.I., '95, Peabody Nor. Coll.; A.B., '96, Univ. of Nashville.
1906, Principal of High School, Cleburne.

W. H. Bruce, A.B., Ala. Poly. Inst.; A.M., Baylor Univ.; Ph.D., Mercer Univ.
1906, President, North Texas State Normal School; 180 W. Hickory St., Denton.

Oscar Lee Dunaway, Ph.B., '97, L.I., '99, A.B., '07.
1911, Superintendent of Schools; 2815 Wood St., Texarkana.

Franklin Lafayette Masterson, A.B., '11, Univ. of Texas.
1911, Superintendent of Schools, Huntsville.

James Hector Morgan.
Superintendent of Schools, Eagle Lake.

W. D. Notley.
Superintendent of Schools, Brenham.

TEXAS—*Continued*

1911 R. W. Persons.
1911, Superintendent of South Park Schools; 895 Highland Ave., Beaumont.

Charles A. Peterson, B.Sc., '03, Lebanon Univ.
1905, Superintendent of Schools; 406 Gonzales St., Yoakum.

James William Shepherd, A.B., '04, Missouri Valley Coll.
1908, Principal of Rusk School; 1405 California St., Houston.

Henry Sims.
1909, Superintendent of Schools, Stephenville.

I. P. Skinner, A.B., '83, Baylor Univ.
Superintendent of Schools, Athens.

Clarence A. Tripp.
1910, Head of Manual Training Department, North Texas State Normal College, Denton; home address, Shepherd, Mich.

1912 E. J. Mathews, A.B., '10, Univ. of Texas.
1911, Registrar, University of Texas, University Station, Austin.

UTAH

1911 J. Preston Creer, Grad. Nor. Sch.
Superintendent of Utah County Schools, Spanish Fork.

Henry Peterson, A.M., '06, Harvard Univ.
Superintendent of Schools, Brigham City.

VERMONT

1911 James Christie Walker, A.B., '04, Dartmouth Coll.
1911, Principal of High and Graded Schools; Lock Box No. 15, Vergennes.

WEST VIRGINIA

1911 Edward Hanson Knabenshue, A.B., '06, Univ. of W. Va.
Superintendent of Schools, Weston.

James Howard Patterson.
1905, Superintendent of Schools, Sutton.

INSTITUTION

1911 State Normal School, Glenville.
Principal, E. G. Rohrbaugh, Glenville.

WISCONSIN

1911 Robert L. Cooley.
1905, Principal of Schools; 211, 17th St., Milwaukee.

Clifford E. Granger, Grad. St. Nor. Sch.
1911, Superintendent of Schools, Peshtigo.

Fred Thomson, '99, Univ. of Wisc.
Superintendent of Schools, Menomonie.

1912 Helen M. Holden, B.L., '87, M.L., '90, Northwestern Univ.
1896, Grade Teacher, Ninth Street School; 1306 Grand Ave., Milwaukee.

Charles M. Purin, A.B., '07, A.M., '08, Univ. of Wis.
1911, Assistant Professor of German, University of Wisconsin; 1609 Monroe St., Madison.

PHILIPPINE ISLANDS

1912 Bruce Ingersoll.
Inspector of Manual Training and Trade Schools for the Philippines, Manila.

PORTO RICO

1911 Wilfred A. Barlow, B.Sc., '07, Univ. of Vt.
1911, General Superintendent of Schools, Department of Education, San Juan.

CANADA

1911 Clarence Bartlett Edwards, A.B., '00, Queen's Univ.
1904, Inspector of Schools; 460 Piccadilly St., London, Ontario.

Robert Fletcher, A.B., '96, Manitoba Univ.
1903, Deputy Minister of Education; 644 Gertrude Ave., Winnipeg, Manitoba.

Jennie Little.
1912, Supervisor of Art, Public Schools; 821 Broadway, South, Saskatoon, Sask.

Fred W. C. McCutcheon, A.B., Univ. of Toronto.
1907, Principal of Collegiate Institute; 555 Adelaide St., London, Ontario.

SOUTH AMERICA

1911 Joseph Alden MacKnight, A.B., '05, Univ. of Denver; A. M., '07, Columbia Univ.
President of State Normal School, Lima, Peru.

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